

286216

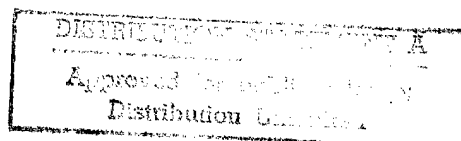
JPRS 83977

26 July 1983

# USSR Report

MILITARY AFFAIRS

No. 1782



19980601 158

DTIC QUALITY INSPECTED 2

**FBIS**

FOREIGN BROADCAST INFORMATION SERVICE

REPRODUCED BY  
NATIONAL TECHNICAL  
INFORMATION SERVICE  
U.S. DEPARTMENT OF COMMERCE  
SPRINGFIELD, VA. 22161

0  
54  
A04

## NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

## PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service (NTIS), Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semimonthly by the NTIS, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

Soviet books and journal articles displaying a copyright notice are reproduced and sold by NTIS with permission of the copyright agency of the Soviet Union. Permission for further reproduction must be obtained from copyright owner.

26 July 1983

# USSR REPORT MILITARY AFFAIRS

No. 1782

## CONTENTS

### MILITARY-POLITICAL ISSUES

Work of Party Commissions (V. Drozdov; SOVIET MILITARY REVIEW, No 5, May 83) .....	1
---	---

### WARSAW PACT AND GROUPS OF FORCES

International Education Among Central Group of Forces (M. Goglev; SOVIET MILITARY REVIEW, No 5, May 83) .....	3
--	---

### ARMED FORCES

Table of Contents: 'SOVIET MILITARY REVIEW' NO 5, May 1983 (SOVIET MILITARY REVIEW, No 5, May 83) .....	6
Adm Sorokin on Current World Situation (Alexei Ivanovich Sorokin; SOVIET MILITARY REVIEW, No 5, May 83) .....	8
Developing Commander's Initiative (I. Yorobyov; SOVIET MILITARY REVIEW, No 5, May 83) .....	13
Actions of Tank Platoon Detailed as Reconnaissance Party (A. Mineyev; SOVIET MILITARY REVIEW, No 5, May 83) .....	16
APC Engine Checkup (V. Vasilyev; SOVIET MILITARY REVIEW, No 5, May 83) .....	19
Veteran Small-Arms Designer Recounts His Experiences (Sergey Gavrilovich Simonov Interview; KRASNAYA ZVEZDA, 20 May 83) .....	22
Military Agricultural Enterprises Provide Food Products, Livestock (I. Isayenko; KRASNAYA ZVEZDA, 24 May 83) .....	26

## GROUND FORCES

Role of Observation in Defense (V. Dneprov; SOVIET MILITARY REVIEW, No 5, May 83) .....	29
--	----

## NAVAL FORCES

ASW Cooperation of Crews of Helicopters, Mother Ship Stressed (N. Shiyan; KRASNAYA ZVEZDA, 20 May 83) .....	32
--	----

## DOSAAF AND MILITARY COMMISSARIATS

Aircraft Maintenance Deficiencies Noted (P. Derkachenko; KRYL'YA RODINY, No 5, May 83) .....	36
---	----

## MILITARY SCHOOLS AND ACADEMIES

Tambov Higher Military Aviation School for Pilots Profiled (B. Sokolov; KRYL'YA RODINY, No 5, May 83) .....	40
--	----

Officer Military Academies Listed, Entrance Requirements Given (SOVETSKAYA MOLODEZH', various dates) .....	44
---	----

Entrance Requirements, Partial List  
Continuation of Military Academy Listing

## MILITARY-POLITICAL ISSUES

### WORK OF PARTY COMMISSIONS

Moscow SOVIET MILITARY REVIEW in English No 5, May 83 pp 37-38

[Article by Captain 1st Rank V. Drozdov]

[Text]

**The editors of "Soviet Military Review" have been receiving letters requesting information on the work of the Party Commissions under the political organs of the Soviet Armed Forces.**

**The following article has been written in compliance with these requests.**

There are Party Commissions under all the political organs of the Soviet Army and Navy. They are elected at Party conferences. The conference decides upon the size of the Party Commission, i.e., the number of members it is to be comprised of. Communists commanding prestige because they have accumulated a wealth of Party experience and enjoying an untarnished reputation are usually elected members and candidate members of the Party Commission. The Party Commission is accountable to the Party conference which is convoked once every two or three years.

In its work the Party Commission is guided by the Programme and Rules of the Communist Party of the Soviet Union, decisions of Party congresses and of the CPSU Central Committee, and Regulations for the Soviet Army and

Navy Political Bodies, orders and directives of the Minister of Defence of the USSR and the Chief of the Main Political Administration of the Soviet Army and Navy.

The Party Commission has the right to approve the decisions of primary Party organisations on admission of new members to the Party and examine individual cases of Communists who have committed an offence. They are also competent to affirm the decisions of YCL primary organisations and committees of military units on expelling offenders from YCL ranks.

The main task of the Party Commission is to enhance the sense of responsibility of Communists for the implementation of Party policy. The purity of Party ranks is its primary concern. It sees to it that every member and candidate member of the Party lives up to

the requirements of the CPSU Rules, and observes Party, state and military discipline.

To this end the Party Commission sums up the questions arising from the practice of admission to Party membership and examination of the personal cases of Communists and submits them to the chief of the political department concerned. The Party Commission regulates (within its sphere) the growth of Party ranks and conducts educational work among the Communists to prevent possible offences.

The Party Commission has the right not only to point out to the primary organisations the shortcomings and errors in admission of new members to the Party, but also to annul an erroneous decision. All errors are carefully analysed. The Party Commission also takes steps to preclude the repeti-

tion of such errors in other primary organisations.

Every applicant for Party membership has to go through a one year term of probation as candidate member. The Party Commission contributes to the ideological education of the candidate members, helps them successfully go through the term of probation and prepare for admission to the Communist Party of the Soviet Union as full members. However, it does not perform the functions of the primary Party organisation. The purpose of the Party Commission is to give timely hints and advice and to see that the Party organisation ensures an all-round, fair and exacting check of the officer or man who has decided to become a Communist.

If a primary Party organisation deems it necessary to impose a penalty on a Communist by making an entry in the registration card or to expel him from Party ranks, this decision shall be examined by the Party Committee of the regiment (or ship), and upon affirmation it shall be referred

to the Party Commission. Every time a personal case is examined the Party Commission sees to it that maximum fairness is observed and that all attending circumstances are thoroughly examined. The main purpose of the examination is to educate the comrade who has committed the offence. The decisions of the Party Commission are made known to the primary Party organisations where such Communists are registered.

The Party Commission sees to it that the Party organisation hear the offender, as a rule, in one year's time on the steps he has taken to rectify the shortcomings for which he was held responsible.

The Party Commission regularly analyses the work of the Party organisations in educating young Communists, in ensuring that they play a vanguard role in combat training and execution of service duties. Frank, informal talks of Party Commission members with Communists, above all with those who must improve, help prevent violations of Party and military discipline.

The fact that the Party Com-

mission maintains constant contact with the commanders, political workers, Party and Young Communist League organisations helps enrich its activity. Such contact enables the Party Commission to delve deeply into all matters that bear on execution of service duties, combat training and social work of Communists.

The work of the Party Commission is organised by its secretary, who is accountable to the chief of the political department. The members and candidate members of the Party Commission regularly inform the Party organisations on its work.

The fulfilment of tasks set to the Party Commission largely depends on planning. Practical experience has shown that in some cases the main measures are included in the plans of Party organs, whereas in other cases these are included in the independent plans of the Party Commission concerned. Both procedures are considered acceptable.

The Party Commission plays an active role in educating Communists and enhancing their vanguard role.

COPYRIGHT: "Soviet Military Review", No 5, 1983

CSO: 1812/197

## WARSAW PACT AND GROUPS OF FORCES

### INTERNATIONAL EDUCATION AMONG CENTRAL GROUP OF FORCES

Moscow SOVIET MILITARY REVIEW in English No 5, May 83 pp 14-16

[Article by Lieutenant-General M. Goglev]

[Text]

The Communist Party of the Soviet Union devotes unremitting attention to strengthening unity and cooperation with the fraternal socialist countries. This cooperation is successfully realised in all spheres of political, economic and ideological life.

The Warsaw Treaty Organisation established in May 1955 serves the cause of peace, socialism and the security of the socialist community from the aggressive encroachments of imperialism. This military-political alliance of socialist countries was set up in response to the formation in 1949 of the aggressive North Atlantic Treaty Organisation (NATO), spearheaded against the USSR and other socialist states.

The 26th Congress of the CPSU stressed that the defensive political and military alliance of the socialist countries has all it requires reliably to defend the socialist gains of their peoples. In this the Communist Party proceeds from V. I. Lenin's precept that the peoples who had taken the path of socialist development needed close military and economic alliance, as otherwise the capitalists would smash and stifle them one by one.

The military cooperation of the socialist countries, the combat friendship of their armies, is part of the international solidarity of the fraternal peoples, and the implementation of the Leninist ideas of proletarian internationalism.

This article is about the way internationalist education is carried out among the officers and men of the Central Group of Forces (CGF).

ICE-FLOES were clearly seen on the black band of the river. A powerful water stream obstructed the way of the advancing Soviet and Czechoslovak troops. The commanders of the pontoon

units of the CGF and the Czechoslovak People's Army (CPA) were assigned the mission to build a pontoon bridge.

Soldiers of the fraternal armies got down to business

without wasting a minute. Pontooners operated efficiently and in team-work.

The assembly of the bridge elements was completed in half the rated time. When the two spans were joined the two officers in charge of the construction, A. Merkel and O. Fara, shook hands.

#### A BRIDGE OF COMBAT FRATERNITY

Soldiers called this crossing "A bridge of combat fraternity." Quite a symbolic name, indeed! Figuratively speaking, the links of this bridge were started as far back as in the years of the Civil War and foreign military intervention (1918-20) when Czechoslovak internationalists fought in the ranks of the Red Army shoulder to shoulder with the soldiers of the young Soviet Republic. Our fraternity was tempered in the flame of the Great Patriotic War (1941-45). Soldiers of the glorious 1st Czechoslovak Corps traversed their path of valour from Soko-

lovo\* to Prague side by side with the units of the Soviet Army, smashing the fascist invaders.

Friendship sealed with blood in the joint struggle against the common enemy is strengthening and developing today.

The patriotic and internationalist education of the personnel of the CGF in the spirit of friendship with the Czechoslovak people and combat co-operation with the soldiers of the CPA are being effected in the course of everyday military, political and ideological work.

---

### INTERNATIONALIST EDUCATION

---

A definite system of internationalist education of military personnel has taken shape. Among the most effective forms of this work are: the Lenin lessons and readings, thematic get-togethers, scientific and methodic conferences, combat friendship meetings and meetings with the 26th CPSU Congress and 16th CPC Congress delegates, with veterans of the Great Patriotic War, veterans of the 1st Czechoslovak Army Corps, and representatives of workers' collectives.

Colonel-General G. Borisov, Commander of the Central Group of Forces, delegate to the 26th Congress of the CPSU more than once spoke to the CGF personnel and met with Czechoslovak workers and soldiers. Many generals

and officers of the CGF take part in the meetings devoted to Soviet Army and Navy Day, to the Great October Socialist Revolution and to the liberation of Czechoslovakia, which are held at plants, collective farms, military units and various organisations.

The officers and men of the CGF take a deep interest in the materials of the 16th Congress of the CPC. Over 50 delegates of Czechoslovakia's highest Communist forum spoke in units of the Central Group of Forces.

Soviet army men visit Czechoslovak industrial enterprises, familiarise themselves with the organisation of production, socialist emulation and life of collectives, and talk to workers. In their turn representatives of the Czechoslovak workers visit Soviet military units.

Internationalist education is well organised in the units where majors S. Kryukov and L. Gladyshev serve. Commanders and political workers enjoy great assistance on the part of the Party organisations. Party committees widely discuss the tasks of internationalist education of the military personnel. Individual Party members report at Party meetings on how they are working to strengthen combat fraternity and friendly ties with the local Party and state organisations and workers' collectives.

Komsomol organisations make a tangible contribution to internationalist education. Vast experience has been accumulated in the unit where Senior Lieutenant S. Yedapin is secretary of the Komsomol committee. They hold very instructive parties of friendship and combat fraternity,

thematic evenings "The Country in Which You Serve," and excursions to Czechoslovak enterprises. This Komsomol organisation was awarded the Challenge Red Banner of the Young Socialist League of Czechoslovakia for successes in the communist education of youth and strengthening of internationalist ties with soldiers of the CPA.

A joint march of the Soviet and Czechoslovak youth along the battle route of the 18th Army of the 4th Ukrainian front and the 1st Czechoslovak Army Corps on the territory of the CSSR was of great educational value. Some 300 soldiers, Komsomol members, took part in it. The march lasted for 5 days and ended in the town of Policka, where in May 1945 the 18th Army with Leonid Brezhnev as chief of the army political department finished its combat path.

In honour of the victory of the Soviet people in the Great Patriotic War and liberation of Czechoslovakia from the fascist invaders the Soviet and Czechoslovak military tourists climbed together Mount Gerlachovka, the highest peak in the CSSR. The participants of this ascent set on the top the state flags of the USSR and CSSR.

Seminars of political workers of the CGF and CPA have become a common practice. Of great benefit, for instance, was a meeting of leaders of the CGF Political Administration and the CPA Eastern Military District. Political workers of the fraternal countries' armies discuss problems of, the activity of political organs, Party, Komsomol and CSSR Young Socialist League organisations.

---

\* The first unit of the CPA was formed in February 1942 in the town of Buzuluk in Orenburg Region. In March 1943 the Czechoslovak soldiers of the 25th Guards Infantry Division had their first battle engagement at Sokolovo near Kharkov.



### TRADITIONAL FORMS

Among the traditional forms of strengthening combat friendship is joint training, especially tactical exercises. They promote the development of mutual aid and cooperation. This helps improve tactical cooperation, permits exchange of experience in troop control and organisation of Party-political work in different kinds of combat exercises.

During the Druzhiba-82 exercise the Soviet and Czechoslovak soldiers acted on the training battlefield in cooperation with the units of the Hungarian People's Army. Gustav Husak, General Secretary of the Communist Party of Czechoslovakia and President of the CSSR gave a high assessment to the allied actions of the fraternal armies during

his visit to the exercise area. In the simulated battles the Soviet, Czechoslovak and Hungarian soldiers again demonstrated their inviolable class and combat fraternity.

The problems of internationalist fraternity are widely covered in the CGF "Sovetsky Soldat" (Soviet Soldier) newspaper. It speaks at length about strengthening combat cooperation with the CPA units and other armies of the Warsaw Treaty member states. Materials of the Class and Combat Fraternity internationalist club find broad response among the readers. These topical columns appear regularly, twice a month. Such features as "We Are Internationalists," "Czechoslovak Life," "Among the Czechoslovak Soldiers," "About the Czechoslovak Internationalists"

are constantly published in the newspaper.

Journalists of the CGF maintain close ties with military journalists of the central organs of the CPA, such as the Ludova Armada magazine and the Obrana Ludu newspaper. They make annual plans of cooperation and map out the routes for joint trips to the units of the CGF and CPA for each training period.

Museums and rooms of combat glory do considerable work in internationalist education, in strengthening friendship with the CSSR workers. They hold meetings with war veterans, and combat friendship gatherings.

Commanders and political workers value highly combat friendship with the Czechoslovak soldiers and in future will do everything to consolidate it.

COPYRIGHT: "Soviet Military Review", No 5, 1983

CSO: 1812/197

# ARMED FORCES

TABLE OF CONTENTS: 'SOVIET MILITARY REVIEW' NO 5, MAY 1983

Moscow SOVIET MILITARY REVIEW in English No 5, May 83 p 1

[Text]

## ★ **SOVIET MILITARY REVIEW**

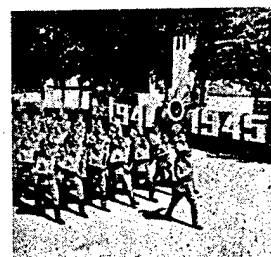
No. 5 MAY 1983

Founded 1965  
Appears monthly in Russian,  
English, Arabic, Dary, French,  
Portuguese and Spanish

Editor-in-Chief:  
**Nikolai CHIKHACHIOV**

## IN THIS ISSUE:

Victory That Will Never Fade	2
Washington's Global Claims by A. Sorokin	4
Karl Marx by A. Popov	8
Capital of Soviet Turkmenia by N. Rumyantsev	12
Internationalist Education by M. Goglev	14
Developing the Commander's Initiative by I. Vorobyov	18
Observation in Defence by V. Dneprov	22
Signal Troops	23
In a Recce Party by A. Mineyev	26
APC Engine Checkup by V. Vasilyev	29
Motor Torpedo Boats by V. Nikolayev	34
Party Commissions by V. Drozdov	37




Successors of combat glory (see article "Victory That Will Never Fade")

Photo by  
N. Blikov



Frontier guards  
(see pp. 39-41)

	Social Nature of Wars by <b>V. Remizov</b>	42	
Soviet Military Review 2, Marshal Biryuzov Street Moscow, 123298, USSR Tel. 198-55-52, 198-55-30, 198-55-65	An Economy That Knows No Crises by <b>G. Sarkisyan</b>  The USSR and Newly-Free Countries by <b>N. Strugov</b>  The New American Military Command by <b>A. Vasilyev</b>	44  47  51	
<b>KRASNAYA ZVEZDA</b> Publishing House	Tanks Advancing in Diamond Formation by <b>A. Ananyev</b>  Preventing Heat and Sun Stro- kes by <b>L. Galin</b>  Towards Higher Achievements in Sports by <b>V. Romanchuk</b>	54  62  63	Nobody and noth- ing is forgotten  Photo by <b>A. Kaga- lev</b>

COPYRIGHT: "Soviet Military Review", No 5, 1983

CSO: 1812/197

## ARMED FORCES

### ADM SOROKIN ON CURRENT WORLD SITUATION

Moscow SOVIET MILITARY REVIEW in English No 5, May 83 pp 4-7

[Article by Adm Alexei Ivanovich Sorokin, first deputy chief of the Main Political Administration of the Soviet Army and Navy]

[Text]

**H**EGEMONISTIC encroachments and the striving to dominate the world scene have always been the characteristic features of imperialism, especially American imperialism. V. I. Lenin, pointing out this feature, warned that world domination in short constitutes the essence of imperialist policy.

The striking confirmation of the veracity of this definition of Lenin's is the hegemonistic policy pursued by the Reagan Administration. The Reagan Administration has brazenly announced its imperial ambitions. Aggressiveness, adventurism and claims to "American leadership" have become the policy of the United States.

As a matter of fact, the American ruling circles, working toward their objectives, have embarked on the path of rejecting the principles of international relations stated in the Final Act of the all-European Conference in Helsinki, signed also by the American President, and reneging on their agreements and arrangements with the Soviet Union reached in the previous years. Striving to realise its hegemonistic designs, Washington ventures to impudently interfere in the internal affairs of sovereign states, the social system of and the state of affairs in which are not to its liking, and dictates "rules of conduct" to its allies and partners, showing total disregard for their interests. As the Political Declaration of the Warsaw Treaty

Member-States adopted this past January at the Conference of the Political Consultative Committee in Prague stresses: "the imperialist circles are pursuing a policy of strength, pressure, diktat, intervention in internal affairs and encroachment on the national independence and sovereignty of states and seek to consolidate or recarve 'spheres of influence.'"

The present foreign policy course pursued by Washington is the embodiment of the views of the most militant circles of the US monopoly capital. The entire activity of the US Administration is permeated with anticommunism and anti-Sovietism. Against the policy of detente it has pitted the policy of confrontation with the Soviet Union and other countries of the socialist community. It torpedoed the ratification of the SALT-2 Treaty and the treaties on the limitation of nuclear tests and underground nuclear explosions for peaceful purposes. It continues its brutal attempts to interfere in Poland's internal affairs, trying to prod counterrevolutionary elements in this country into open attacks.

The Camp David deal, the direct spurring of Israel into an aggression against Arab peoples, the overwhelming support of Great Britain's colonialist ambitions in the course of the armed conflict in Southern Atlantic, unceasing provocations, including military ones, against socialist Cuba and people's Nicaragua, the backing of antipopular dictatorial regimes in Latin American countries, the organisation of coups d'etat beneficial for the United States, the waging of an undeclared war against Afghanistan—such are the concrete deeds of American imperialism. The establishment of a US Central Command (CENTCOM) whose zone of operations embraces a vast area of the globe located thousands of kilometres away from American shores is a vivid manifestation of US global ambitions.

At the same time Washington is persistently exploring new methods of retaining the position of the USA as a leader of the "free world" and is arrogating to itself the right to shape the common course of the West in the world arena, on the ba-

sis of recognition by the other Western countries of Washington's objectives as their common objectives. According to the defence directive for fiscal years 1985-89, a recently publicised top secret Pentagon document, the US "vital interests" cover practically all regions of the world. This paper also openly proclaims the possibility of direct US military interference on the part of Washington's allies and "friends" at any point of the globe. The mercenary motives of the American ruling circles particularly clearly manifest themselves in their notorious sanctions against West European firms filling orders for the West Siberia-West Europe gas pipeline.

Real socialism constitutes the principal barrier to the US hegemonistic designs. The USA openly declared that its prime goal is to weaken socialism and give itself a "free hand."

The American ruling circles display especial concern for ensuring an "ideological support" of their imperialist course. To attain this goal they are using all the diplomatic, propaganda and "psychological warfare" means at their disposal.

The crusade against communism which Reagan proclaimed last year also serves the same purpose. The "programme of democracy and public diplomacy" announced by Washington with so much pomp this February regards it as a crusade against all those who do not agree with the US policy of diktat and tyranny. In this way the United States endeavours to arrogate to itself the right to grossly interfere, under the pretext of "protecting democracy," in the affairs of other states, above all the developing ones, which they would like to tether to American policy.

Proceeding from the correlation of forces that has taken shape on the world scene, and realistically taking into consideration the action of the laws of social development and the lessons of history, the Soviet people are convinced of the futility of the USA's attempts to weaken socialism and of its claims to world domination. At the same time one cannot ignore the fact that in their drive for hegemony the US ruling circles are drawing upon their tremendous economic, technical and military potential and pursue an extremely adven-

turous line in international affairs, staking mainly on the "position-of-strength" policy and armed violence.

US imperialism's attempts to attain these goals by the methods of armed violence manifest themselves in different forms. They include the threat of force, the unbridled arms race and the attempts to impose it on other countries, the expansion of its military presence to various areas of the globe and shows of force, the use of arms in local conflicts and the waging of limited aggressive wars. The imperialist hawks do not rule out the extreme form of armed violence — an all-out nuclear war. Far from ruling it out, they are engaged in intensive and planned preparations for such warfare.

The White House has embarked on the road of intensifying militarist preparations and achieving military superiority. First of all Washington wants to upset the existing rough balance in the field of strategic armaments between the Soviet Union and the United States.

In October 1981 President Reagan announced his comprehensive programme of nuclear rearmament of the USA for the 1980s, including the creation of the latest models of strategic attack weapons such as MX intercontinental ballistic missiles, a fleet of nuclear-powered submarines armed with Trident missiles, B-1B and Stealth strategic bombers, long-range cruise missiles of different types of basing, and the modernisation of the communication system and the system of control over strategic offensive forces. The implementation of this programme has already begun and is rapidly being carried out.

The USA refused point-blank to follow the Soviet Union's example when the latter adopted a historical commitment not to be the first to use nuclear weapons. The representatives of the present Administration declared "unacceptable" the far-reaching proposals of the USSR on the limitation and reductions of strategic armaments which was praised not only by progressive forces but also realistic-minded politicians in different Western countries.

The US plans aimed at upsetting the approximate parity in medium-range nuclear armaments now existing in Europe also pose a serious threat to the cause of peace. According to the decision imposed by the USA on NATO, already this year the deployment of almost 600 American Pershing-2 and cruise missiles with nuclear warheads will be started on the territories of a number of West European countries. The implementation of this plan would lead to a serious buildup of the US

strategic potential targeted on the Soviet Union and would turn West European nations into hostages of Washington.

And all this is done in spite of the fact that the Soviet Union and the United States have been negotiating in Geneva for almost a year and a half on how to limit and reduce nuclear armaments. It appears that Washington would like to block an agreement and, citing the collapse of the talks, to attain, in one way or another, superiority in this field. On March 23 President Reagan delivered a diffuse speech on problems of military policy, which boils down to the fact that the United States should intensify its rearmament efforts to become the dominating military power in the world. The speech left no doubt as to the present US Administration's intentions to continue on the very dangerous path leading to a nuclear holocaust. In a Pravda interview, Yuri Andropov, General Secretary of the CPSU Central Committee, said in connection with this speech: "The problems of war and peace should not be treated so light-mindedly. All attempts to achieve military superiority over the USSR are futile. The Soviet Union will never allow this, it will never be left defenseless in the face of any threat. Let Washington firmly realise this."

The USA is intensifying its attempts to draw NATO into its imperialist plans, a fact which was confirmed by the winter session of the bloc's leading agencies, at which a decision was adopted to speed up war preparations of its member-states. At the same time the NATO Council decided to intensify its activities outside the bloc's sphere of action.

An important part in pursuing this goal is assigned to the Rapid Deployment Force and to 1,500 US military bases and other military installations located on the territories of 32 foreign countries, where over 500,000 American servicemen are permanently stationed. In addition to the Washington-sponsored NATO, ANZUS, ANZUK and other military blocs, these bases are regarded as a springboard for an aggression in "one and a half," "two and a half" and even "five" wars planned by the Pentagon.

Washington is also stepping up its attempts to involve Japan, linked with the United States by a so-called security treaty into its plans and preparations posing a threat to peace. The USA is intent on turning this country into a watchdog in Eastern Asia and the Pacific Ocean area and using its territory for its aggressive purposes.

All this is designed to create the material base for the struggle against socialism and the liberation movement of the peoples, and for the realisation of US hegemonistic ambitions. The military doctrines and conceptions being developed by Washington also serve the same purposes. Official Administration spokesmen are heard to discourse on the possibility of "limited," "protracted" and other varieties of nuclear war. This is intended to accustom the people to the thought that such a war is not only acceptable but that the USA can win it.

The strategy of "direct confrontation" Washington adheres to is openly aggressive in nature. It provides for the decisive use by the United States of its military might as a means for exercising world diktat, protecting "vital interests" of American imperialism in different regions of the world, including access to the sources of strategic raw materials and energy resources. The prime stake here is placed on the preparation for a strategic nuclear war and diverse use in it of strategic forces — from "limited" nuclear strikes to mass employment of nuclear weapons. The emphasis in these plans is placed on delivering the first strike.

Besides, the strategy of "direct confrontation" is aimed at preparing the armed forces of the USA and its allies for waging war with the use of conventional weapons alone and expanding military operations to any part of the globe where the enemy is "most vulnerable."

For many countries and peoples the USA's drive for world domination and its hegemonistic ambitions are fraught with the loss of national independence and statehood itself, and with the use of violence against freedom fighters on the part of antipopular repressive regimes.

The aggressive policy of the United States and its pursuit of world domination jeopardise the most sacred and principal right of man — the right to live. The military preparations of the United States and its NATO allies and the elaboration of various versions of nuclear war should be regarded as a direct encroachment on this right.

Being aware of habits and nature of US aggressive forces, the USSR will maintain high vigilance and constant combat readiness of its Armed Forces at the level of modern requirements. "Our defensive military doctrine," wrote Marshal of the Soviet Union D. F. Ustinov, Minister of Defence of the USSR, "designed strictly to repulse an external threat, will not be passive. In the event of aggression our armed forces and the armies of the fraternal socialist countries will defend the acquisitions of socialism without any hesitation, with to-

tal determination, and with the use of all the defence and economic might of our states."

Today, as never before, the peoples are coming to the forefront of history. They have won the right to have their say and no one can muffle their voice. This voice is becoming louder and louder.

The socialist community is a powerful and healthy organism which is playing an enormous and beneficial role in the world of today. Keen interest throughout the world was aroused by a new important proposal advanced at the Conference of the Political Consultative Committee in Prague, namely the proposal to conclude a Treaty on the Mutual Non-Use of Military Force and Maintenance of Relations of Peace between the member-states of the Warsaw Treaty Organisation and the member-states of the North Atlantic Treaty Organisation.

The participants in the conference expressed their full approval and support of the Soviet Union's peace initiatives. The USSR has advanced recently a wide range of important initiatives directed at limiting and reducing strategic and nuclear weapons in Europe. These proposals were summarised in the report by Yuri Andropov at the Kremlin jubilee meeting on the occasion of the 60th anniversary of the formation of the USSR. Our position is clear, he said. A nuclear war — whether big or small, whether limited or total — must not be allowed to break out.

Setting forth these proposals, the Soviet Union considers it necessary to declare once again before the whole world that it will never let its security or the security of its allies be jeopardised. The Communist Party of the Soviet Union and the Soviet Government warned more than once that the USSR shall never permit anyone to upset the military-strategic balance existing in the world. This warning is based on the real capabilities of mature socialism. The USSR will be compelled to counter the challenge of the American side by deploying corresponding weapons systems of its own, such as an analogous missile to counter the MX missile and its own cruise missile, which is being tested at present to counter the US long-range cruise missile.

The Soviet Union is doing everything in its power for the triumph of reason in international affairs. It will continue to consistently pursue the Leninist policy of peaceful coexistence of states with different social systems, remaining at the same time vigilant in the face of the schemes of the enemies of socialism and peace, and taking the necessary measures to safeguard the country's security.

Admiral Alexei Ivanovich Sorokin was born in 1922. He joined the Soviet Army in 1941. He was an active participant in the Great Patriotic War (1941-45), where he commanded a mortar crew and was a Komsomol organiser of a battalion and then a regiment. After the war he graduated from the Lenin Military Political Academy, then served as chief of the political department of a naval division, chief of the political department of a naval base, Member of the Military Council — Chief of the Political Administration of the Northern Fleet, and Member of the Military Council — Chief of the Political Administration of the Soviet Navy. In the Armed Forces he worked his way up from soldier to admiral, to the First Deputy Chief of the Main Political Administration of the Soviet Army and Navy.

Admiral Sorokin was a delegate to the 25th and 26th CPSU congresses, and is a deputy to the RSFSR Supreme Soviet.

---

COPYRIGHT: "Soviet Military Review", No 5, 1983

CSO: 1812/197



## ARMED FORCES

### DEVELOPING COMMANDER'S INITIATIVE

Moscow SOVIET MILITARY REVIEW in English No 5, May 83 pp 18-21

[Article by Major-General I. Yorobyov, D.Sc. (Military)]

[Text]

The road to victory in battle is not an easy one and there are no universal methods for achieving it which would suit any situation. In organising combat the commander proceeds from his knowledge of conditions in which it will be fought and principles governing its preparation and conduct. In adopting a decision he must take into consideration the component elements of the situation at hand, above all the enemy tactics, combat capabilities of friendly units and specifics of the terrain. But this does not boil down to a simple, mechanical correlation of forces. To enjoy numerical superiority over the enemy is not enough for victory in battle; much depends on the commander's ability correctly to use the forces available and on his combat maturity whose most important components are creativity and initiative. The commander's initiative and creativity are a fusion of knowledge, innovation and daring, insight and tactical prudence, his striving to successfully accomplish the mission assigned and the superior commander's order.

In virtually any type of combat the commander can introduce something new into the methods of fire destruction of the enemy, types of sub-units' combat formation, methods of executing manoeuvres, etc, i.e., he can use the tactics which would surprise the enemy and ensure success.

In December 1941, during the counteroffensive of Soviet troops near Moscow, a tank battalion fighting in one of the front sectors as an advanced detachment was ordered to capture a crossing over

the Beryozka River and stubbornly hold it to prevent the enemy from withdrawing beyond the river. Soon reconnaissance reported that two enemy columns totaling up to two infantry battalions were simultaneously advancing toward the crossing area: one from the east and the other from the south. After calculating the speed of movement, the commander decided to rout both columns in turn. Having detailed a part of the forces to cover the southern flank, he performed a secret manoeuvre; he delivered a surprise blow at the column ad-

vancing from the east and then transferred his efforts to the southern sector. The tankmen's swift attack took the enemy unawares, frustrated his plans and prevented his withdrawal to a new line in an organised manner.

As has been mentioned above, the commander can display creative initiative in any type of combat. For example, in the offensive he may exhibit it in selecting the time, place and method of attacking the enemy or executing a manoeuvre. By decisive and surprise operations the attacker strives to gain and firmly maintain fire superiority, continuo-

usly to combine fire with the movement of subunits, to ensure a rapid pace of advance and quick rout of the defender. The element of surprise is especially important here. During the Great Patriotic War night conditions were widely used for purposes of surprise. Attacks usually began either at nightfall, or at midnight, or, not infrequently, before dawn. Sometimes "noiseless" (without artillery preparation) attacks were used. In some operations, for instance in the battle of Berlin, searchlights were switched on before the tanks and infantry rushed in attack in order to enhance the psychological effect on the enemy.

Today more diversified attacking methods can be used than in the past. If during World War II infantry units had to penetrate organised defences of the enemy on foot, nowadays they can be reliably neutralised by fire and therefore motorised infantry subunits can carry out an attack staying in combat vehicles, which enhances its power and swiftness.

In organising and conducting fire combat the commander can also use diversified tactical methods which would surprise the enemy. In particular, he may skilfully combine engagement of the enemy at close and far approaches, deliver simultaneous fire attacks from the ground and from the air by different types of weapons, forestall the enemy in destroying fire weapons, quickly mass fire to destroy or neutralise most important targets, etc.

The more dynamic and fluid the battle is, the greater initiative is required of the commander to timely note and make use of any mistake made by the enemy, to strike a blow

against his weak point in the combat formation and frustrate his plans. For example, if the enemy has prepared to repulse a daytime attack, it is advisable to launch it at night, or if he is bringing in reserves to deliver a counterattack, they should be stopped when still on the march. To put it in a nutshell, enemy actions should be opposed by counteractions to make him always late in implementing his plans.

In the tactical defensive depth, battle usually falls into a number of centres of combat and is conducted in separate areas. In that case the possibility exists to make use of gaps and breaches in the combat formation of enemy troops for rapid exploitation of success and for executing envelopments and turning movements. For example, attacks from different directions may prove to be very effective for capturing enemy strong points used to hold road centres, dominating features of the ground and mountain passes. Such an attack makes it possible to disperse the defender's combat formation and destroy his subunits piecemeal.

The defensive battle presents no less favourable conditions for displaying initiative and creativity. On defence, the troops usually have to counter an attack of superior enemy forces. To achieve success the defender must skilfully use favourable terrain lines to organise stable defensive positions, as well as the power of all types of fire and obstacles in combination with vigorous and flexible manoeuvres.

A lack of forces should be compensated for by a skilful organisation of defences, proper selection of areas where main efforts will be concent-

rated and by the staunchness and persistence of troops. Modern powerful and efficient weapons enable the commander to enhance the stability of his defence.

In organising combat, the commander should display a creative approach to selecting the proper layout of the FEBA, locating fire weapons on the ground, to the subunit combat formation, creation of fire and barrier systems, etc. Defence only then becomes unsailable for the enemy when he cannot comprehend the principles behind its organisation and when it continuously prepares surprises for him. To achieve this, strong points should be located so that they "fit" into the terrain and are well camouflaged. Provision should be also made for laying ambushes, creating dummy installations and wide manoeuvres.

Such a creative approach was exhibited, for instance, at a tactical exercise by Captain Ye. Belov, commander of a motorised infantry battalion. The battalion was ordered to defend the approaches to an important road centre. During on-the-spot reconnaissance the commander thoroughly studied the terrain and determined probable actions of the enemy. In the area where the main attack was expected, he organised a dummy FEBA. The combat security subunit organised and occupied a position in this area. With the beginning of the attack it was to retreat into the depth, thus drawing the enemy into a killing ground.

The backbone of the defence was the fire of all types

and various obstacles. Primary and alternate positions for infantry fighting vehicles and tanks attached to the battalion were also organised.

A manoeuvre with forces was planned with due regard for terrain conditions. Thus, to ensure secrecy, the companies of the battalion second echelon, which were ordered to launch a counterattack, moved to the deployment line along a hollow which crossed the battalion defensive area. During combat the attacker was unable to completely disclose the battalion system of defence. Some of his attacking subunits fell into a fire ambush and suffered heavy "losses." The battalion successfully coped with the mission assigned.

This and many other examples testify that initiative and creative abilities displayed in organising combat and controlling subunits in the course of it enable the commander to win victory over superior enemy forces.

There are diverse methods for developing creative thinking and initiative. The commander's combat training standard is inseparably linked with his ideological and theoretical training level and his ability to make full use of Marxist-Leninist methods for acquiring military-scientific knowledge. Within the officer training system, at lessons and exercises the Soviet officers study the nature and character of modern warfare, combat capabilities of the weapons and materiel, and learn how to manage subunits in complex and dynamic situations.

COPYRIGHT: "Soviet Military Review", No 5, 1983

CSO: 1812/197

## ARMED FORCES

### ACTIONS OF TANK PLATOON DETAILED AS RECONNAISSANCE PARTY

Moscow SOVIET MILITARY REVIEW in English No 5, May 83 pp 26-28

[Article by Major A. Mineyev]

[Text]

A recce party is an agency of army reconnaissance which is formed in all kinds of battle. A recce party can operate before the front and on subunits' flanks and when there are gaps, in the depth of the enemy combat formations. On the offensive the recce party carries out the following missions: it detects centres of resistance hampering the movement of subunits, mine fields, slashings and other obstructions, defines coordinates of nuclear devices, artillery, tanks, control points and radar equipment, establishes directions of advance of reserves, their strength, composition, level of terrain organisation and advancement of the defensive lines in the depth of the defences, etc. On the example of a tactical exercise the article below describes the actions of a Tk Pl detailed as a recce party.

#### THE SITUATION

**A**FTER a powerful fire preparation the 2nd Tk Bn passed over to the offensive, broke through the "enemy" defence and began to rapidly exploit the success attained. Soon it reached the line: Sidorovka-Kruglaya Wood (see Sketch). By the time the data from the superior headquarters had been received. They were alarming. The "enemy," trying to frustrate an attack, began to advance reserves from the depth of the defences. Air reconnaissance detected their forward subunits 30-40 km northwest of Prudnikovo. Besides, near Hill 100.6 the pilots de-

tected a concentration of special vehicles.

After assessing the situation the Bn CO decided to detail the 2nd Tk Pl of the 5th Tk Coy as a reconnaissance party. He held that favourable conditions arose for its actions in the depth of the "enemy" defences. As a result of coordinated efforts by the attackers the stability of the "enemy" defences was broken. There appeared considerable gaps in combat formations. In these conditions the recce party was able to play an important role in the combat mission assigned to the Tk Bn.

The Bn CO called the Pl leader over the radio and ordered him to carry out reconnaissance in the direction: Hill 110.4-Zolotovo, esta-

blish the strength of the "enemy" reserves advancing in the eastern direction, reveal the artillery positions on Hill 100.6, determine the character of the Bystraya River in the sector: Bolshoi Wood-Nagornoye, to force this water barrier and then to move forward towards Malaya Wood.

Having specified that the recce party was to cover 30 km in the depth of the "enemy" defences the Pl leader ordered tank crews to check the readiness of weapons and combat equipment. While preparatory work was going on he planned the route and the order of movement of the recce party, assigned missions to patrol vehicles, defined probable lines of contact with the "enemy" and the possible character of his actions.

Plotting the situation on the map, the Pl leader paid attention to the fact that the terrain in the reconnaissance area was broken with large forests. This created conditions for the successful fulfilment of the assigned mission. The tankmen, together with rapid movement along the planned route, could secretly carry out reconnaissance of the "enemy."

After estimating the situation the Pl leader decided, first of all, to move forward to Hill 100.6. There he planned to set up observation, define the strength of the approach-

ing "enemy" reserves and to determine coordinates for artillery fire positions. Then he intended to reconnoitre the approaches to the Bystrya River, force it and continue reconnaissance.

#### **WHY DID THE PL LEADER TAKE PRECISELY THIS DECISION! THERE WERE OTHER VARIANTS**

In particular, he could have immediately concentrated all efforts in the direction of the approaching reserves which, according to the information from the superior headquarters, posed the greatest danger for the Tk Bn. It seemed that this mission should have been carried out first of all. It is not fortuitous, however, that the Bn Co ordered reconnaissance in the area of Hill 100.6 where a concentration of special vehicles was detected. He assumed that here there might be either a control point or some other important objective. In order not to leave this area outside the sphere of actions of the recce party, the Pl leader decided to carry out reconnaissance of the terrain and the "enemy" in consecutive order, moving outside the roads at maximum speed from one point advantageous for observation to another, strictly observing camouflage measures.

He proceeded from the fact that the opposing side took energetic measures to restore lost positions. Consequently, the situation could have changed at any moment. The Pl leader also did not exclude possible encounters with the withdrawing "enemy" groups or forward subunits of the approaching reserves. According to his calculations, the recce party was to encounter "enemy" reconnaissance most probably on the line: Zholtaya Wood-Hill 80.4; his security

on the march on the line: Bolshoi Wood-Hill 75.6; his main forces on the line: Prudnikovo-Zolotovo.

#### **IN CONFORMITY WITH THE DECISION TAKEN, THE PL LEADER ASSIGNED MISSIONS TO THE CREWS**

After reporting on the "enemy" and the mission of the recce party he pointed out:

"Tank No. 21 is patrol vehicle No. 1. It is to move along the route of the party at the visual communication distance, to carry out reconnaissance of the "enemy" and the terrain. Everything detected should be reported immediately.

"Tank No. 22 is to move and be ready to give fire support to patrol vehicle No. 1. To carry out observation in front, to the right and in the rear.

"Tank No. 20 is patrol vehicle No. 2. It is to follow tank No. 22 in readiness to protect the recce party from the rear, and to carry out observation to the right, to the left and in the rear."

At first glance it seems that the Pl leader missed some data when assigning the missions. However, he acted correctly because he took into consideration that the order of assigning missions and degree of its detailing depends to a considerable extent on the time allotted for fulfilling the mission. In the given situation time was short. Therefore the commander of the recce party mentioned only the main information and did not repeat data already known to the tankmen. All the more so since the platoon was geared to operating in the recce party even before the beginning of the tactical exercise. Such questions as call signs and frequencies and who was appointed the deputy recce commander

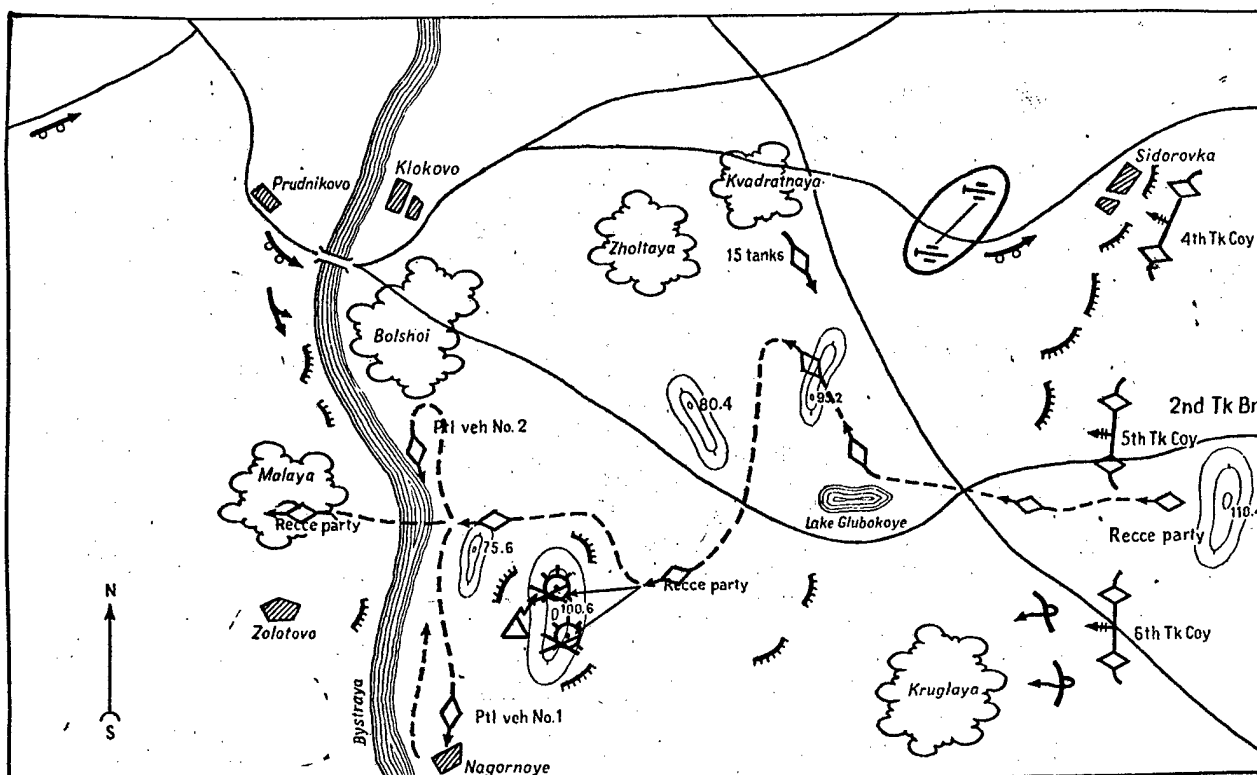
were brought to the tankmen's notice in advance. Such a work procedure made it possible to spend only several minutes assigning the mission.

#### **ACTIONS OF THE RECCE PARTY**

Taking advantage of the gaps in the "enemy" battle formations as well as camouflaging features of the ground, the platoon secretly penetrated into the depth of the defences. When approaching Lake Glubokoye the recce party commander sent to Hill 95.2 patrol vehicle No. 2. Soon a report came from there: "Observing the "enemy." Having moved forward to the hill the Pl leader established that a column of 15 tanks was moving in the direction of Kruglaya Wood, and at the given time was in the southern outskirts of Kvadratnaya Wood. He immediately reported these data to the Bn HQ.

The operative work of the Pl leader should be noted here. Sometimes, however, recce party commanders reporting about the "enemy" begin to expound upon possible actions of the "enemy," spending much time on this. But the mission is to transmit the obtained information as soon as possible to the superior commander. The latter possesses greater possibilities for generalisation and all-round analysis of these data. Therefore, the actions of the Pl leader were correct.

Continuing the reconnaissance, the recce party reached Hill 100.6. Precisely here an aerial reconnaissance detected a concentration of special vehicles. The Pl leader thoroughly organised reconnaissance of the area. Soon the commander of patrol vehicle No. 1 reported that he had detected camouflaged launching sites.



They were located on the south-western slopes of the hill.

The situation was extremely complicated because the final preparations were under way for launching missiles. Having realised that drawing up a message and transmitting it to headquarters and receiving an answer would take some time during which the "enemy" could deliver a blow at the attacking subunits the PI leader took a decision to destroy the launching sites with the concentrated fire of his platoon. In such situations when it is clear that only seconds are left for launching missiles the commander can take a decision to independently destroy important targets.

The "fire" of the tankmen was accurate. After reporting to the Bn headquarters on the destruction of the launching sites, the PI leader directed the recce party to the Bystraya River. The route ran parallel to the direction of the with-

drawing subunits. Here the demand made of the reconnaissance in the depth of the defences — not to move along the roads of the "enemy's" withdrawal — was strictly observed. The "enemy," installing mine obstacles, organising road blocks and ambushes and leaving protection subunits, tried to hinder the movement of the attackers as well as the actions of the reconnaissance agencies.

Soon the commander of patrol vehicle No. 1 reported: "Reached the river. Discovered a ford. No 'enemy' detected on the opposite bank." (A ford must be searched for in places with gentle slopes to the water. Its characteristic signs are paths overgrown with grass, road tracks ending on one bank and continuing on the other, ripples on the water surface characteristic for river shallows).

The PI leader reached the river and carried out recon-

naissance in the area of the ford. Here the river was nearly 70 m wide with a depth of 1.2-1.5 m and with a current of 1 m/sec.

Simultaneously, patrol vehicles Nos. 1 and 2 carried out reconnaissance to the right and left of the ford in the sector: Bolshoi Wood-Nagornoye. Observing the opposite bank, the commander of patrol vehicle No. 2 detected a column comprising 20 APCs moving from Prudnikovo. Soon the "enemy" began to organise positions on the line: Prudnikovo-Zolotovo with engineer works. All this indicated that a new strong point was being organised here.

After reporting this information to the Bn HQ the recce party commander decided to cross to the western bank of the river on the ford. Some time later the Tk PI secretly approached Malaya Wood and continued observation of the "enemy" from there. The mission was fulfilled.

## ARMED FORCES

### APC ENGINE CHECKUP

Moscow SOVIET MILITARY REVIEW in English No 5, May 83 pp 29-31

[Article by Major Engineer V. Vasilyev]

[Text]

The compression gauge is intended for checking the piston assembly and the timing gear valves, and for monitoring the air pressure in the cylinders at the end of the compression stroke. The latter checkup is performed on a warmed-up engine, with the spark plugs unscrewed and the throttle and choke valves fully open. The rubber tip of the compression gauge is inserted into the seat of the first cylinder plug. After 10-12 revolutions of the crankshaft turned by the starter the compression gauge scale will register the maximum pressure at the end of the compression stroke. To determine the pressure in any of the remaining cylinders, it is necessary to slightly open the compression gauge exhaust valve.

The air compression in each cylinder is measured two or three times. The compression gauge readings should not differ by more than 1 kgf/sq. cm. The normal compression ratio for the BTR-60 APC engine ranges within 7 to 7.5 kgf/sq. cm, and the minimum permissible value is 6 kgf/sq. cm. Reduced compression in the cylinders by 30-40 per cent indicates broken or stuck piston

Maintenance of all carburetor engines, including those of armoured personnel carriers, consists in visual inspection, monitoring engine operation in different modes, and lubricating and tightening the crank and timing gears, and the cooling, lubrication, fuel and ignition systems. To carry out all these operations in the field, maintenance vehicle is provided with the appropriate equipment, tools and accessories, e.g., a compression gauge, model 179, an E-102 stroboscope, and a K-301 device.

rings, a loose valve-to-seat fit and other disrepairs caused by wear of conjugated sealing parts. To find out the cause of the trouble, reduce slightly the compression pressure in the cylinders, add 20 to 30 cu. cm of engine oil to each cylinder, and check the pressure at the end of the compression stroke once again. Higher compression testifies to air leakage through the piston rings. If the compression gauge readings remain unchanged, the valves are loose in their seats.

It is noteworthy that worn piston assembly parts, piston rings in particular, result in a higher oil level in the engine crankcase and higher oil consumption. Whereas in a new engine oil consumption per 100 km is 0.4-0.8 per cent of the fuel consumption, a worn-out engine will require 10 to 15 times as much oil as that in the latter case. The engine should be repaired if oil consumption exceeds fuel consumption by 4 per cent.

Oil consumption due to burning is checked with the vehicle running at a speed of 30-45 km/h on a flat hard-surface road. Prior to checking, the engine is filled with a standard brand oil up to the dipstick's upper mark. After a minimum of 50-km run oil is poured out of a preliminarily weighed-out metering vessel up to the dipstick's upper mark. Oil should be added with the vehicle placed on a level ground, no sooner than five minutes after the engine has been shut off. After consumption is assessed, the amount of burnt-out oil is determined accordingly.

The stroboscope is used for monitoring the initial spark advance angle. Its shock-resis-

tant pistol-shaped polystyrene body houses a stroboscopic tube, a lens to focus the light beam, a chassis with the elements of the circuit diagram, a cord which connects to the storage battery and a conductor to connect it to the spark plug of the first cylinder.

With the instrument functioning, a push-pull oscillator transforms the direct current generated by the storage battery into a high-voltage alternating current. After being rectified the latter is fed to a storage device comprising a resistor and a capacitor. The resistor functions as a limiting resistance. As the capacitor is being charged, it accumulates power for the stroboscopic tube. Having connected the instrument to the storage battery and the first cylinder

spark plug, the engine is started and warmed up to the temperature of the cooling liquid (70-90°C). Then the vacuum spark timer tube is disconnected from the carburetor, and the minimum stable engine speed is adjusted.

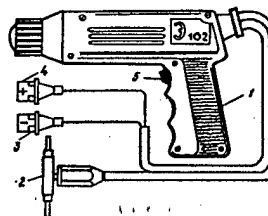
With the engine operating, a high-voltage pulse is fed from the first cylinder plug to the starting electrode of the stroboscope tube to light it up. As the current accumulated by the capacitor of the storage device is consumed, the tube produces a number of flashes synchronous with the moment of ignition in the first cylinder. The light beam emitted by the instrument is focused on the clutch case inspection hole. If the spark advance angle is adjusted correctly, and the crankshaft rpm are

constant, the marks on the clutch flywheel will seem motionless, aligned with the top dead center (TDC) mark on the crankcase. In the BTR-60 APC engine the spark advance angle should be within 0 to

12°. The ignition timing is carried out with the engine running, by smoothly rotating the distributor body clockwise or counterclockwise.

After the required spark advance angle has been set, the automatic centrifugal spark timer is checked for proper functioning by increasing the engine speed gradually, owing to which the marks on the clutch flywheel illuminated by the stroboscope tube will shift smoothly relative to the TDC mark on the crankcase.

The operation of the vacuum spark timer is checked with



E-102 stroboscope: 1 — illuminator; 2 — adapter; 3, 4 — positive and negative terminals respectively; 5 — ON-OFF button

the engine idling at 2,000-2,500 rpm, by quickly connecting the timer tube. Owing to the resultant depression the movable mark must deviate sharply from its initial position. If the mark does not change its position, the tube is choked or leaky.

The K-301 device is designed for monitoring the following parameters: resistance of the breaker contacts and their closing angle; insulation and capacitance; sparking intensity and uninterruptedness; crankshaft speed.

To check the APC engine fuel system, thoroughly inspect



the carburettor, fuel pump, and pipe unions and other connectors for likely leakages. Tighten leaky parts, if any.

The carburettor adjustment may be judged by certain outward signs. If, for instance, an overly rich mixture flows from the carburettor into the cylinders, detonations in the muffler may be periodically heard, and black smoke will escape from the exhaust pipe. In this case, carbon deposits will form on the ignition chamber walls, valves, pistons and plug insulators.

One of the reasons of the above troubles is a change in the fuel level in the float chamber. To check the level of fuel in the K-84M carburettors installed on the BTR-60 APCs, an inspection hole, closed with a plug, is provided in the float chamber wall. Turn out the plug and pump fuel by manipulating the hand priming lever. The fuel must not flow out of the inspection holes, and its level must be seen distinctly. Otherwise, remove and adjust the carburettor.

It is most essential to adjust the carburettor to minimum engine idling speed. Before adjusting, warm up the engine, check the ignition system and throttle control linkage

for proper functioning, and see that there is no air inleakage in the inlet pipeline.

Adjust the carburettor in the following sequence. Turn the idle adjusting screws (to adjust the quality of the mixture) all the way in, then counterclockwise 2-2.5 turns. Start the engine and turn the throttle stop screw (to adjust the quantity of the mixture) until the minimum possible engine speed is obtained. Without changing the position of the throttle valve, turn the idle adjusting screw in or out until the engine speed reaches a maximum. Now turn out the throttle stop screw again to set a minimum steady crankshaft speed. Then turn the idle adjusting screw to bring the engine speed to a maximum, which corresponds to the new position of the throttle stop screw.

Setting in this manner now the maximum, now the minimum possible crankshaft speed, find the most favourable position for both screws at which the engine rpm will be the lowest. To check the standard of adjustment, open and sharply close the throttle valve. If the engine does not stall, the adjustments are considered correct.

COPYRIGHT: "Soviet Military Review", No 5, 1983

CSO: 1812/197

## ARMED FORCES

### VETERAN SMALL-ARMS DESIGNER RECOUNTS HIS EXPERIENCES

Moscow KRASNAYA ZVEZDA in Russian 20 May 83 p 2

[Interview with Sergey Gavrilovich Simonov, Hero of Socialist Labor, USSR State Prizewinner and RSFSR Distinguished Inventor, by correspondent Lt Col A. Garavskiy: "I Value Responsibility in People"]

[Text] At a readers' conference at the Daugavpils Higher Military Aviation Engineering Academy imeni Yan Fabritsius, the desire to meet in the "Azimut" with S. Simonov, the oldest Soviet small-arms designer, was expressed. At the request of KRASNAYA ZVEZDA correspondent Lt Col A. Garavskiy, Hero of Socialist Labor, USSR State Prizewinner and RSFSR Distinguished Inventor Sergey Gavrilovich Simonov answered questions that interested the future officers.

[Question] Sergey Gavrilovich, how did you become a weapons designer?

[Answer] I loved metal when I was still a youth--in a village smithy, where I was a blacksmith's assistant. Then came the desire to make things, to invent. At the textile-printing factory owned by Kuvayev, where I found a job later, they kidded me. After mastering one machine tool and receiving a rating and, together with it, an increase in pay, I asked to go to another machine, and then also to a neighboring department. My interest in the unknown was irresistible. The pay was scarcely enough for a living. In my youth I worked at an iron foundry, at a factory that repaired textile machines and in the tool-room of a machine shop. My teachers were the key workers, the old craftsmen.

The Great October Revolution found me in Kovrov, at a machinegun plant that was being built. Here in 1918 I saw famous weapons engineers and designers--Vladimir Grigor'yevich Fedorov and Vasiliy Alekseyevich Degtyarev. The work with them--as a mechanic, a skilled craftsman, and a senior master craftsman of the shop--had much to do with determining my destiny. I understood not just consciously but with my heart: the young Republic of the Soviets and our workers-and-peasants' army were very much in need of good weapons. I wanted to contribute to the supply thereof and to do my bit.

[Question] More than 150 types of weapons that you have created are preserved in the USSR Armed Forces' Central Museum. Which was your first?

[Answer] I began with a light machinegun. I gave it 8 years of my life. I designed it surreptitiously, in a tiny shop, under a kerosene lamp. I checked the ideas on wooden models. I tried to make the machinegun lighter in weight than the existing systems, simpler to manufacture and to handle, and with high reliability.

I worked out the design, but the test model was not manufactured quickly. Many military specialists at the time assumed that, in future combat actions, not small arms but heavy machineguns--more powerful and well turned out--would play the deciding role. The design was shelved.

[Question] Failures occur in creative work. How do you take them? How do you get out of a difficult situation?

[Answer] It was difficult to endure the first failure. It came down to my leaving the machinegun plant, and I went to Podolsk--to a sewing-machine plant.

In a little while, thanks very much to M. V. Frunze, views on the role of light automatic weapons changed. One day, on returning from work, I received a printed envelope with a coat-of-arms, sealed with wax. In it was authorization for the manufacture of a model of a light machinegun of "designer Simonov's system." This was the red-letter day of my life.

I returned to my former place of work. Two test models of the weapon were fabricated. The machinegun fired, and it fired excellently. It withstood rigid proving-ground testing. The design ideas incorporated in the weapon proved to be correct. But by that time the assembly-line output of several modifications of Degtyarev's machinegun had been arranged. And I don't have to explain that converting to the manufacture of a new product would have hindered supplying the troops with an extremely necessary weapon.

Over the years I understood this especially clearly: failures in the work of a designer are relative. Each type of weapon is a new frontier in design thought. My first machinegun, let's say, unlike other systems, did not have one threaded connection. This was a technical innovation. I later used a number of the ideas in other weapons models, particularly in the automatic rifle that was adopted as a weapon in the 1930's. The barrel of the machinegun was joined to the barrel extension by means of a movable rectilinear pin. When, at the start of the Great Patriotic War, I received a task to design an antitank rifle, I used precisely such a pin. After removing it, it is easy to take the barrel and barrel extension apart, enabling the weapon to be carried in two parts. The PTRS [Simonov antitank rifle] was automatic, and its gas chamber was located on top, as on the previously developed AVS [Simonov automatic rifle] in the 1930's.

Incidentally, only 22 days elapsed from the time I received the task to develop the antitank rifle until the first test firings from it. The war dictated the deadlines. The experience of previous years was telling.

In brief, without the 150 weapons models that can be seen in the museum, the 3 models would not have been adopted as armament. There could not have

been even any kind of basically new design solutions, which were the contribution of many creators of weapons. In exactly the same way, it stands to reason, any of the Soviet designers has a right to speak about the results of his work.

[Question] Sergey Gavrilovich, thousands of people love the solemn ritual of the change of the guards at V. I. Lenin's Mausoleum. The ritual of meeting high-ranking foreign visitors to our country is impressive. Frequently one hears the comments: the guards in the Honorary Guards Company have elegant weaponry. They are talking about your self-loading carbine--the SKS-45. Were you concerned about its beauty when you designed the weapon?

[Answer] The SKS [Simonov semiautomatic carbine] was created during the Great Patriotic War, and I was concerned primarily about its high combat qualities. The carbine series passed its tests successfully in the active army, at the 1st Belorussian Front.

The beauty of a weapon is not, of course, the main quality. The designer is concerned about convenience and practicality, simplicity and lightness of weight. And, as a result, beauty also is attained. I tried to see to it that the weapon would be convenient for the soldier to use under any conditions--during firing, in bayonet combat, on the march, in formation, and even at the halt. In choosing the exterior contours I tried out the weapon myself many times. Modeling clay helped to find a natural positioning of the hands. Several times the weapon's center of gravity was moved.

[Question] You have, Sergey Gavrilovich, more than half a century of party seniority. You have behind you tens of years of design work. What kind of vital conclusions would you like to draw to share with the future officers?

[Answer] More than anything I value personal responsibility. Some people at times boast that nature has given them capabilities, or even talent, but they do little to display their gifts completely, to turn it over to the service of the people. A talent, in my opinion, is an obligation to others, an obligation to work. Today's officer candidates do not have to borrow capabilities. Let each one, in the bargain, also add to them a creative nature, a strong will and devotion to duty.

I would like that sons and grandsons, in mastering their first-class weapon, find out the history of its development. Russian and Soviet weaponmakers always have been the bearers of advanced design ideas, selfless patriots of their native land. A general of the old Russian Army, V. G. Fedorov, who wrote the fundamental work, "Avtomaticheskoye oruzhiye" [Automatic Weapons] back in 1907 and who created the world's first submachine gun in 1916, accepted the Great October Socialist Revolution without hesitation and turned his inventions and his talents over to the people. I recall in 1940, before the war, whose breath was being felt, he wrote, "History of the Rifle."

"It is equally important," he said then, "to both possess the weapon and to know its glorious history. History, the science of the past, illuminates the future."

Among Fedorov's pupils, famous designers whom I have known and together with whom I have worked, there were no few who had been mechanics and blue-collar workers. Years later they were called diamonds in the rough. I would like to advise future officers: help your subordinates in every way possible to discover their capabilities and to acquire high technical sophistication in the army's schools.

11409

CSO: 1801/337

## ARMED FORCES

### MILITARY AGRICULTURAL ENTERPRISES PROVIDE FOOD PRODUCTS, LIVESTOCK

Moscow KRASNAYA ZVEZDA in Russian 24 May 83 p 2

[Article by Col Gen I. Isayenko, chief of the Central Food Administration, USSR Ministry of Defense: "A Year of Intense Labor: Fulfilling the Food Program"]

[Text] One year ago the CPSU Central Committee plenum adopted the USSR Food Program. For the Armed Forces, which continued to fulfill their primary task of reliably defending the peaceful labor of the Soviet people, the ensuing period was marked also by work in the interests of further developing agricultural production, better using food resources, and the struggle by soldiers, workers and employees for economy and savings in the broadest sense of the word. Much was done to strengthen the material and technical base of agricultural enterprises and to improve transportation and storage of food reserves.

The contribution of military sovkhozes to accomplishing the Food Program was marked. It is enough to say that sowed areas alone increased by 6,000 acres, including 1,000 acres on irrigated land. Livestock barns have been built for 28,500 head of cattle and 350,000 poultry. Deliveries of tractors, trucks, other equipment, and mineral fertilizer to farms has increased. The number of storehouses and the extent of convenient railroad spur tracks in the farms has significantly increased.

All this enabled production to be increased over 1981 by 11 percent for potatoes, 13 percent for vegetables, 8 percent for meat and 6 percent for milk.

Today our specialized farms have numerous herds of horned cattle, swine, sheep and poultry, and many of them are also engaged in breeding fish and rabbits. The soldier's table contains more and more hothouse vegetables and greens.

I would especially like to mention the successes in producing agricultural products and in animal husbandry by military state farms in the Kiev, Odessa and Moscow military districts and the Northern and Baltic Sea fleets. Among the leaders in socialist competition were the workers of the Prokhladnoye Military State Farm who in 1982 fulfilled the plan for production of meat by 106 percent, milk by 150 percent, eggs by 103 percent, grain by 119 percent and potatoes by 126 percent. We are proud of the successes of such workers as Severomorets Military State Farm Milkmaid V. Balashova, who milked 4,616kg of milk from each cow; Yevpatoriyskiy Military State Farm Herdsman N. Siminichenko, who achieved a high average daily weight gain by his cattle; and

Il'ichevo Military State Farm Poultry Woman I. Ugleva who obtained 262 eggs from each laying hen, as compared to a planned 225.

The army and navy has increased the number of military units which completely provide for their own needs for meat and vegetable products. This is especially characteristic of the Moscow, Baltic, Belorussian, Volga and other military districts, where ever more comprehensive subsidiary farms are being developed. On the whole the subsidiary farms of units, institutions, military training institutions and military enterprises during the past year increased production of meat by 14.4 percent and of potatoes and vegetables by 12 percent. Among the factors contributing to this growth first of all should be noted that the land assigned to military units was used much more efficiently. Now it is used not only for hay mowing, but also for growing potatoes, vegetables, grain and fodder. Planting of alfalfa, food beans, peas, and other crops has expanded.

In mobilizing people to successfully fulfill planned targets, we do not forget about the people themselves, about insuring that they live in comfortable apartments and work in modern industrial premises. Therefore, a great deal of work is being carried out on social reconstruction of sovkhos settlements. Last year alone 18,000 cubic meters of living space were built in military sovkhoses.

The development of private plots of the families of workers and employees also receives attention. They produce 3,000 tons of meat, 18,500 tons of milk, and 7.5 million eggs. In other words, their contribution to improving the food situation is appreciable. Today, many private plots are given needed assistance in obtaining cattle for fattening, veterinary service is provided, and necessary feeds are apportioned.

A year of intense labor is behind us. Realistically assessing our achievements, we see that much still remains to be done to increase the capabilities of military agricultural enterprises and mechanize and automate all production processes. It is also necessary to still further increase sowed areas, cattle herds and laying in of fodder. With respect to this, improving the equipment situation and farming methods in our sovkhoses has made it possible to develop a guaranteed reserve of fodder. Therefore, today the task exists of preparing enough fodder on each farm both for the public herds and for the cattle in private plots of workers and employees.

In some military districts there remain farms which are lagging, and I would especially like to emphasize the need to raise them to the level of the advanced. Improving their work is possible, first of all through better use of the land, fertilizer and equipment. The same thing can be said about the development of private (kitchen) plots. Unfortunately, in a number of military districts there are still units where such plots have not yet been organized.

Analyzing the work of agricultural enterprises and private (kitchen) plots for four months of this year shows that the pace of spring field work is significantly higher than that of the same period last year. For example, sowing of early spring crops was accomplished well and completed in five or six days.

Potato and vegetable planting is being completed. The technology used in caring for the crops is adjusted depending on weather conditions.

The winter period of indoor cattle maintenance and its transfer to summer pastures is being concluded everywhere. I must say that cattle wintering this year was better and more organized. In the sovkhozes alone, horned cattle increased by 2,000 head compared to the same period last year. Meat products increased accordingly.

Fulfilling the instructions of CPSU Central Committee General Secretary Yu. V. Andropov, expressed at the 18 April 1983 CPSU Central Committee Conference, each military sovkhoz and subsidiary farm is presently working to provide the planned harvest, raise cattle and poultry productivity, and increase meat, milk and egg production by 50 percent over the level of the 10th Five-Year Plan. Fulfilling these tasks will be our new contribution to accomplishing the Food Program.

9069

CSO: 1801/340



## GROUND FORCES

### ROLE OF OBSERVATION IN DEFENSE

Moscow SOVIET MILITARY REVIEW in English No 5, May 83 pp 22, 36

[Article by Lieutenant-Colonel V. Dneprov]

[Text]

**D**uring an offensive a motorised infantry battalion met with stubborn resistance. Realising that the battalion stood no chance of exploiting the success achieved, the commander issued the order to assume the defensive and consolidate. As neither the commander nor the staff had sufficient information on the enemy, reconnaissance was immediately organised. It was carried out from two observation posts; besides, companies and platoons had their own observers. Judging by the gradually accumulating reconnaissance data, the battalion faced superior forces of the "enemy," who strove to bring up his reserves as soon as possible and to pass over to the offensive. The bulk of his manpower and combat equipment was concentrated on his left flank, which could be confirmed by the tanks detected at a half a kilometre's distance in a small wood. By all appearances that was the reserve for building up the effort on the route of advance. Along with the coordinates of the artillery fire positions, the obtained data enabled the battalion CO correctly to assess the situation which had taken shape and take timely measures to repulse the attack.

As we can see, a considerable role in organising combat operations was played by observation posts, whose personnel brilliantly coped with the assigned mission. This was largely due to a high proficiency level of the servicemen, who were well trained and possessed solid reconnoitring skills. That was why, using characteristic signs to the best advantage, they determined with a high degree of accuracy the composition of the "enemy" forces; location of tanks, ATGMs and other weapons, and the beginning of the "enemy" advance from the depth and deployment into assault formation.

A perfectly organised system of observation in defence is quite invaluable. In a battalion it is set up so as to ensure the best observation of the terrain and the enemy to a maximum depth before the front and at the flanks of the

defence area. To this end, observation posts (OPs) and individual observers dispose in echelons. Their number depends on the situation and the combat mission.

A battalion organises one or two OPs, and company details 2 or 3 observers. Practice has shown that even a small number of OPs and observers can carry out the following missions: disclose or specify the enemy dispositions, his composition and nature of his actions, location of tanks, artillery, command and observation posts, radars, engineer constructions and obstacles, detect in good time all changes in the enemy's routine, and determine the beginning of advance from the depth and deployment for the attack. During battle OPs also observe the position and actions of organic subunits and neighbours, and the results of the fire of artillery and other weapons.

An OP is generally made up of 2-3 men. Organising their work, the senior observer studies the enemy position in the designated area, assigns missions to the observers, establishes the order of relieving them, draws up the terrain layout, checks on the serviceability of the communication facilities and reports readiness to the subunit commander. Subsequently the latter is systematically kept posted on the results of observation. When important targets, and also drastic and sudden changes in the enemy position and actions are spotted, he is informed without delay.

For reconnaissance by observation it is practicable that each section, platoon and company has, respectively, 1-2, 3-6 and 9-12 men possessing not only good eyesight and hearing, but also visual memory. This makes it possible for a battalion to keep 1 or 2 OPs and a reserve of observers.

Targets on the battlefield will not be timely and accurately detected and their evolutions correctly assessed, i.e., reconnaissance missions will not be carried out successfully, unless each scout has a perfect knowledge of not only the locations of different targets within subunits' combat formations, but also the characteristic signs by which they could be decamouflaged. These signs are divided into general and specific. The most important general signs include the peculiarities of targets' outward appearance, location on the terrain and in combat formations, indications of activity of any kind and of its results (sounds, traces of combat equipment, fire, dust, faulty camouflage, etc.), specifics of engineering organisation of the ground, shining of certain parts, characteristic shadows.

The observers on the OP must be perfectly aware of what targets and in what situation they are likely to locate. They must know, for instance, that trenches and dugouts are best seen on the forward slopes of heights, on the edge of or a clearing in a forest, and on the outskirts of an inhabited locality. They are usually connected with the rear by communication trenches, parts of which are accessible to visual observation. Trenches and dugouts being organised are the easiest to spot, for at such moments they are not sufficiently camouflaged.

Positions of artillery batteries are generally organised in locations protected against ground observation, e.g., in forest clearings, behind the reverse slopes of heights, in hollows and behind inhabited localities. Nevertheless, they can be detected by the sounds of salvoes fired, and dust and

smoke rising above the fire position. In poor visibility and at night flashes of fire are conspicuous against the background of clouds. It should also be borne in mind that fire from a howitzer is accompanied by a soft sound, and from a gun, by a sharp sound; the flight of a howitzer shell can be identified by a peculiar rustling resembling a series of splashes.

**Mortar positions** can be found at a distance of 1 to 3 km from the forward edge behind steep slopes of heights, in ravines and quarries, by steep river banks, and behind buildings. Their location is betrayed by peculiar noteless sounds of mortar fire, always preceding the sound of bursting mines. If we carefully examine the area from which the shots are heard, we shall see jets or strips of smoke rising upwards in the direction of firing, which is indicative of the presence of a mortar battery or platoon fire positions. Moreover, rings of smoke rise over each mortar on a clear day. Counting the rings, we can easily determine the numbers of mortars.

**Observation posts** can be spotted in places wherefrom the terrain around them could be scanned without hindrance. That is why it is advisable thoroughly to study the slopes of heights fit for observation, ground features and forest clearings. If sun rays are sloping towards the enemy, the OP will be betrayed by the gleaming of instrument glasses, no matter how thorough the camouflage may be.

**Tanks** are easily identified by track clanking and rumble of engines. Sounds produced by a column of moving tanks are heard at a distance of 2-4 km, and those of a single tank, at a distance of up to 1.5 km.

A column of tanks (or APCs) performing a march in the daytime can be detected by a cloud of dust trailing behind it. To locate a dug-in tank, one should visualise its probable sizes with different degrees of engineer organisation of the position it occupies. For example, with a tank at a strong point used as a stationary weapon emplacement, only its turret with the aerial will be seen rising over the trench.

**Antitank weapons** are most likely to be spotted on tank-threatened sectors: near bridges, on roads, at cross-roads, in bushes, on the approaches to inhabited localities and on routes leading to crossings of water obstacles.

**ATGM positions** are found in the same locations where antitank weapons are usually sited. ATGM launchers are recognised by the characteristic look of the guide rails resembling a rectangular frame, and missiles with cross-shaped fins. During launching they can also be identified by the jet trail.

**Machine guns** are disclosed due to flashes of shots and pulsating jets of white smoke. Besides, tall grass and bushes in front of the fire position are generally cut down, and the breastwork of the trench shielding a machine gun is somewhat higher than its neighbouring portions. A machine gun position is clearly visible in winter, when the snow in front of it is thawed somewhat, taking on a blackish tint due to the action of powder gases.

The above signs of targets and objectives are of considerable help to scouts in carrying out missions.

The most important quality of an observer is the ability patiently to observe the area of a likely target location and thoroughly to correlate the signs detected with the terrain and the situation. Otherwise, he will most surely fail to obtain trustworthy information.

COPYRIGHT: "Soviet Military Review", No 5, 1983

CSO: 1812/197

## NAVAL FORCES

### ASW COOPERATION OF CREWS OF HELICOPTERS, MOTHER SHIP STRESSED

Moscow KRASNAYA ZVEZDA in Russian 20 May 83 p 2

[Article by Maj N. Shiyani, military navigator-sharpshooter: "On One Bearing"]

[Text] Getting the job done, a creative approach.

High waves rocked the ASW cruiser with increasing strength. "Moskva" CO Capt 1st Rank Semen Danilovich Shaykin from time to time cast quick searching glances, now at the weather-data table, now at the stirred-up sea, which was breaking the line of the horizon. The ship's navigator, Capt 3d-Rank N. Ivanchuk, could understand the workings of the commander's mind, his uneasiness: just a few minutes ago Shaykin had told him with annoyance:

"If the storm intensifies, we will hardly be able to organize a joint search--we will not be able to send the helicopters up."

"We will have to rely on our ship's sonarmen," answered the navigator.

"It happens that it is better to work together, there is a greater guarantee of finding the submarine."

Several years ago such a conversation could not have taken place: there was not at that time such precise coordination among the sonarmen, and an operation based upon one bearing did not, as they say, achieve interaction as accurately as is achieved now. Shaykin had been convinced several times recently of the advantages of a joint search, when the fliers and the sailors tackled an underwater target with confidence, under the most complicated situation.

"Let's try changing course, let's go into the waves," said the CO.

The rotary-winged craft, under the command of Maj Yu. Gurlev, rose up in the air. In the cruiser's sonar compartment was Seagoing Warrant Officer V. Sanitskiy.

Gurlev's helicopter hovered not far from a sonar buoy that was almost diving into the waves, as if it were a float. Experience and knowledge of the "enemy's" tactics helped the helicopter pilots to choose the place for hovering.

"Commander, I hear it! The echo is excellent! That's it" said the navigator, repressing his joy.

"It must be checked," said the CO, unhurriedly.

But this actually was the submarine. The fliers transmitted the target's coordinates to the ship. The cruiser's sonar was also tuned to this bearing, which was now the common one for all the search forces. The task of detection and simulated destruction of the submarine was carried out successfully. At the critique on the exercise, among the factors that insured success the CO noted especially the high degree of coordination of the work of the aircraft and ship specialists as the basis of a reliable guarantee of successful solution of the complicated task.

It is said that in order for people to get to know each other, they must spend a long time together. The salty waves and the sky above it have caused the sailors and we, the ship's fliers, to relate to each other. They and the common responsibility for the security of the motherland. Friendship, unlike love, does not come at first sight. There was a time when the breath of distrust wafted between us. But we got acquainted with each other during the tense military work, and now mutual relationships are tightly bound by the sailor's knot of mutual understanding and respect. I recall once, before an exercise, when the role of joint search for underwater targets was still being underestimated, and we were working on questions of mutual actions. And then one of the ship's officers remarked with surprise:

"Hey, look, helicopter fliers in the sonar room are extremely unusual!"

Now no one is astonished to see aviators and the ship's sonarmen together in the sonar room after flights, listening together to a recording of the "voices" of the sea. These exercises are an unusual exchange of experience, a school of special learning.

The fliers on the cruiser, the same as the sailors, measure the intensity of their service not just by the time spent in the air, but also by the number of long-range cruises and number of contacts with submarines. They always speak about the hours of a raid in rough terms. But no one loses count of the two latter indicators.

The coordination of aviators and sailors in their mutual actions begins, in my view, with mutual understanding between the corresponding officers-in-charge. Naval pilots have many purely professional service peculiarities that the sailors should consider. One of them is the strictest sequence of training. This means the necessary number of flights and landings for each exercise in combat training, a definite, mandatory number of hours of accrued flying time under simple and complicated conditions, by day and by night, and constant perfecting of piloting habits.

Some ship CO's apparently do not understand why aviators need to fly so often, and they see the necessity for combat craft to take to the air only during a search for submarines or to use weapons to "destroy" them. And "playing it safe," at times leads, in the final analysis, to failures in performing combat missions.

Of course, such cases are exceptionally rare. Capt 1st Rank S. Shaykin is one of those CO's who performs missions skillfully. For him, both the sailors and the aviators are members of one family, and he feels party responsibility for training both of them. He is interested in the concerns of the helicopter pilots, the progress of their training, their mood, their professional growth. The ship's joint combat operations missions are constantly submitted to discussion by the communists. The ship's party committee considers questions of interaction and the shaping of high combat, political and moral qualities on the part of the sailors and aviators to be the heart of its activity. Many measures and plans for party and political work are directed toward getting the servicemen of the various specialties to study each other's individual qualities better, which is often important during the course of joint combat training.

The basis of precise interactions of sailors and aviators is high professional training of each of them. All the cruiser's aviators know that the ship's sonar section is rated excellent and advanced. Seagoing Warrant Officers V. Sanitskiy and V. Kozlov are masters in searching for submarines. The sailors, in their turn, know that the helicopter flying unit that is based on the ship has borne the title "excellent" for several years now. The most experienced navigator-operators are Capt A. Mitin and A. San'kov. In brief, the sailors and the fliers know everything about each other. They are equally glad at each other's successes, and they do not try to push the blame from themselves if misfortune suddenly occurs in their very precise and complicated work. In this case, the course of the exercise is analyzed jointly, the cause is found and recommendations are worked out for eliminating it. I will cite a characteristic example.

The mission did not promise anything new--to find a submarine. The usual scheme was worked out and implemented: jointly they studied the region, the depths and the bottom relief, and the hydrology was considered.

Both the sailors and the fliers had been competing to reduce the time taken to detect the target. The minutes allocated for the search were fast running out. Reports by the helicopter crews from the search area and by the ship's sonarmen came unambiguously: "the horizon is clear."

Capt 1st Rank Shaykin involuntarily thought about the submarine's CO: an officer of outstanding intellect and skill. It was felt that he was waging the battle boldly and ably; as they say, he does not play the game of give-away. A violent enemy of fixed patterns, especially in matters of tactics, Shaykin always preferred a strong "enemy" in an exercise. He did not consider himself infallible. But he could not reconcile himself to defeat. The duty of an ASW officer required: "Think! Act!" And he calmly advised the sonarmen to be more attentive, to probe first one sector, then another. During the reports of the flight supervisor he gave precise directions: conduct the search, let the crews show initiative.

The ship's sonarmen "got" the submarine. They held it for a long time, the contact was continuous. Shaykin understood: this occasion was far from a success for his "far-sighted" sonarmen. The detection was late. But

something else tormented him: why didn't the helicopter crewmen, who were "tail-hovering" near the submarine, find it by intersecting?

They searched jointly for the cause. Staff officer of the Surface Ships Section Capt 3d Rank B. Karmanov and aircraft navigator Maj A. Tkachev analyzed many variants of possible mistakes, discarding one after the other.

As a result, by making repeated analyses they found that the beam is not propagated in the water here in the usual fashion. As a consequence, when tuning their sets, by taking the peculiarities of the sea's hydrology into account, both the aviators and the ship's specialists found a trusty "far-sighted" observer. This experience augmented our tactical arsenal.

In speaking about reserves for raising skills in searching for submarines, I would like to touch on this matter. The navigator-operators who come to us and to the ship's helicopter crews are not, unfortunately, taught enough in the schools about searching for the underwater enemy by means of sonar gear. They have to learn this art in detail in the unit. I think that the question of further improving the initial training of naval aviators requires earnest review. This will raise the reliability of mutual actions of the forces that search for submarines and will enable us, the fliers, to work with confidence with the sailors on a single bearing.

11409

CSO: 1801/338

## DOSAAF AND MILITARY COMMISSARIATS

### AIRCRAFT MAINTENANCE DEFICIENCIES NOTED

Moscow KRYL'YA RODINY in Russian No 5, May 83 p 14

[Article by P. Derkachenko, head of aircraft maintenance department, USSR DOSAAF Central Committee: "Take Last Year's Lessons into Account, Textbook Maintenance for Aviation Equipment"]

[Text] ...All conditions that day favored a productive day of flight training: there were no clouds, visibility was good and the flight schedule had been well-planned. The schedule included among other things the first flight in the Yak-52, a sports and trainer aircraft new for the Dushanbe flying club. Instructors and students waited with impatience for it to take off to see how it would behave in the air. At the appointed time the flight director cleared it for takeoff. The Yak-52 travelled down the runway, gathering its speed...but it didn't take off. When it was about half-way through its takeoff run, the pilot suddenly throttled back. The speed indicator was not functioning.

Why?

A check of the aircraft revealed that the flying day had been spoiled by a flagrant disregard of basic requirements governing procedures involved in the preflight check of the aircraft. In assembling the aircraft an aircraft equipment technician had failed to connect the static and dynamic pressure lines properly. He had not checked for proper aneroid-diaphragm instrument readings. Neither the aircraft technician nor the engineer had checked the work of the instrument specialist. It was clear that the people in Dushanbe had failed to take a good look at the practical experience of clubs which had already begun to use the Yak-52 and to familiarize their aircraft specialists with material KRYL'YA RODINY had published on special features of the process of assembling the Yak-52 and preparing it for flight operations, despite the fact that they had received special instructions on the subject. This knowledge would have helped avoid errors and in developing quicker mastery of the Yak-52.

I have referred to this incident because this year will see most of our flying clubs using the Yak-52 to train their sports aviators and improve their flying skills. As distinct from the Yak-12, with which we are now thoroughly familiar, the Yak-52 is more complicated to control and operate and in the air is subjected to greater loads. So the period during which a club is familiarizing itself with this new aircraft will also see greater demands placed on technicians and all aircraft specialists in the way of heightened awareness and increased responsibility for all work performed on the aircraft, from assembling a newly arrived Yak-52 to putting it in the air.



In the meantime, however, not all of our mechanics and technicians or even of their engineer supervisors are demonstrating this kind of heightened attention and vigilance. We have already seen instances in which the Yak-52 has been improperly assembled, where the technical, mechanical condition of the aircraft has not been thoroughly studied and in which the operating condition of its various systems has not been adequately checked in the course of preflight preparations, the forced cancellation of the flight at the Dushanbe flying club serving as evidence of this.

We are now beginning a period of particularly intensive flight training. The amount of work required of all aviation engineering services personnel, particularly of our operations people, is going to increase accordingly. The spring and summer months are going to be a real test of their professional maturity. They are going to have to do more and do it faster, not failing to overlook the slightest detail, and to keep in mind the rule, borne out by practical experience itself, that has it that "success in the air is forged on the ground." For it is precisely on the ground, in the process of preflight preparation, during the checks and inspections performed before each new flight that the foundation is laid for the operational reliability of both our fixed- and rotary-wing aircraft and for the successful accomplishment of flight exercises. It will be in clubs which strive continually to instill in their aircraft specialists a deep sense of personal responsibility for the quality of their own performance, which organize work in an efficient, well-planned manner and which make vigorous efforts to publicize and disseminate information concerning the experience of leaders in socialist competition, it will be in clubs like this where we will see work proceed according to plan and activities conducted without incidents due to the failure of some piece of equipment.

Aviation engineering services personnel of the Kinel'-Cherkasy, Vitebsk and Minsk flying clubs have begun this summer period of intensified operations fully prepared. With active assistance from party, trade union and Komsomol organizations, their leaders, S. Baranov, V. Druy and G. Novodranov, have made effective use of the winter period to improve the professional skills of their engineers, technicians and mechanics and to develop in each individual the habit of adhering rigorously to the requirements of documents governing the preflight preparation of both fixed- and rotary-wing aircraft. Well-planned operational organization and rigorous step-by-step monitoring of all work combined with tight work discipline will insure that aircraft are readied for flights quickly and reliably during the summer period of intensified flight operations as well.

Unfortunately, all clubs have not yet been able to instill in their technical personnel a sense of personal responsibility for their work and the habits of discipline and rigorous adherence to rules governing preflight and postflight inspection of aircraft. So it comes as no surprise that organizations like this will experience flight incidents as a result of poor quality work during preflight preparations. Only indiscipline and inadequate supervision of the work of aircraft technicians on the part of brigade leaders and maintenance engineers can account for the Kostroma club's sending up aircraft, the cockpit canopy on one of which was improperly closed, another one of which had not been refueled with the proper amount of fuel following the preceding flight and a third of which had had a foreign object left inside the fuselage. Technical maintenance unit specialists had left this dangerous object behind after having completed their servicing. The technician then failed to notice it when he accepted the aircraft. Such violations of the rules governing the preflight preparation of aircraft as these which have occurred over the past year should provide material for a serious

lesson for comrade Polovnikov, the club's deputy chief of aviation engineering services. He has clearly not been devoting adequate attention to an effort to instill in his subordinates the proper work discipline and sense of personal responsibility for the safety of the club's flight operations.

Other flying clubs have also experienced instances in which aircraft have been sent up with improperly secured cockpit canopies, cowlings and access covers and fuel tanks on which the caps had not been replaced. When an Mi-2 helicopter lifted off from the Vladimir flying club on one occasion, for example, the right reducing gear cowling flap came open. This happened because a technician had gone off to ready another helicopter before he had completed his preflight preparations on the first one, the flight crew, however, demonstrating negligence on its part in accepting the aircraft. In violation of the rules it had started the engines and taken off without a technician being present.

The flight incidents which personnel have been responsible for over the past year were consequences of lax and inefficiently organized aircraft preflight maintenance and breaches of production and operational discipline.

The tasks set our flying clubs by the 9th All-Union DOSAAF Congress require that we impose drastically more exacting demands upon all personnel involved in the organization and ground support of flight operations and put forth more consistent efforts to insure rigorous adherence to all rules governing aircraft and aviation equipment maintenance.

It will be important, however, to combine these increased demands with paternal concern for the people involved. For the fact is that the overwhelming majority of our aircraft specialists are truly self-sacrificing workers. They are the first to arrive at an airfield and the last to leave. Concern for improvement of their working conditions, for providing them with adequate time off and the state of their professional skills is one of a club director's foremost responsibilities. It is of great importance to render our aircraft specialists effective assistance in improving their knowledge and skills in preventing aviation equipment failures and continually working to add to the fund of knowledge they need to draw upon in their practical everyday work.

Considering the relationship in which he stands to an aircraft or helicopter, the aircraft technician will be respectfully referred to as its "boss." This in fact reflects the way the system actually works. He is the one who initiates and concludes the work done in preparing them for their next flight. The engine, avionics and other system specialists do their work on an aircraft only with his go-ahead; and then he, the technician, is responsible for checking to see that they have done everything properly. So the quality of the preflight work done on an aircraft and, consequently, to a great extent the safety of the flight itself will depend in turn upon the extent to which the aircraft's "boss" is professionally qualified, to which he is demanding of both himself and specialists doing related work and to which he is well-disciplined and capable of working with maximum efficiency.

The technician is one of the central figures of the flying club. It is therefore important to enhance his authority and instill in him a love for this critical and difficult profession. Also of importance is to impose more exacting demands upon our personnel and thereby to insure more rapid, more efficient dissemination of innovative practical experience accumulated by the leading practitioners.

To insure the safety of flight operations and preserve equipment is a task of national importance. The efforts of all aviation specialists—engineers, technicians and mechanics—should be directed toward accomplishing it. Each individual practicing these professions must be instilled with a deep, consuming sense of personal responsibility for performing the best quality work in a timely manner and for rigorous adherence to laws governing flight operations.

COPYRIGHT: "Kryl'ya rodiny," 1983

8963

CSO: 1801/330

## MILITARY SCHOOLS AND ACADEMIES

### TAMBOV HIGHER MILITARY AVIATION SCHOOL FOR PILOTS PROFILED

Moscow KRYL'YA RODINY in Russian No 5, May 83 (signed to press 11 Apr 83) pp 18-19

[Article by Colonel B. Sokolov, head of the school's political department: "Higher Pilot Training, In Our Aviation Schools"]

[Text] The Tambov Red Banner Higher Military Aviation School for Pilots imeni M. M. Raskova is one of our country's oldest pilot-training schools. It traces its history back to the Engel's pilot-training school founded in 1931. For forty years now it has borne the name of Marina Raskova, a heroic daughter of the Soviet people whose memory is sacred to us, just as service to the motherland was sacred to her, service to those ideals which for many decades now the Communist Party has instilled in the Soviet people. Young patriots, many of whom underwent their early training as members of defense society organizations, are today donning the soldier's overcoat to keep the skies clear above our land. The road they have chosen is a difficult one. Difficult, but honorable. For they are in fact carrying on the famous efforts of their fathers.

Readiness to do the great deed for the glory of the motherland is one of the oldest fighting traditions among the graduates of our school. You cannot remain unmoved when you read Marshal of the Soviet Union G. K. Zhukov's memoirs concerning the heroic deed of Senior Lieutenant V. Skobarikhin, a hero pilot and a graduate of the Engel's pilot training school: "To rescue his comrade, Senior Lieutenant V. Vuss, from a dangerous situation in this unequal battle, he fearlessly rammed the Japanese fighter...." This was in combat over the Khalkhin-Gol River. Those prewar years saw V. Kalachev, V. Belosov, I. Lakeyev and I. Kvashin cover their names with undying glory. They all became heroes.

Our graduates particularly distinguished themselves during the Great Patriotic War. L. Mikhaylov, A. Kadomtsev, B. Panin, D. Tarasov, D. Koryazin, P. Potapov and V. Zemlyanskiy all rammed ground targets in disabled or burning aircraft. I. Palyakov, S. Achkasov, A. Pozdnyakov, A. Avdeyev, M. Osipov and N. Terekhin rammed other aircraft in the air.

During the time they spent at the school in Tambov they all acquired a thorough military and political knowledge, they were tempered ideologically and they developed a greater love for and loyalty to their motherland and the Communist Party. In their violent clashes with the enemy they acted fearlessly and valiantly.

The motherland has honored the great deeds of her sons appropriately. Some 190 of the school's graduates have become Heroes of the Soviet Union, while M. Odintsov, V. Golubev

and M. Gareyev were honored with this award twice." Among our graduates have been Marshals of Aviation G. Zimin and I. Pstygo and Colonel Generals of Aviation L. Batekhin and A. Volkov.

The torch carried into battle by the generations which have gone before has been passed into reliable hands. Our school's graduates are serving the fatherland, laboring continuously to strengthen its defensive strength. The Guards pilots of the regiment commanded by Guards Colonel V. Sadikov led last year's air force-wide socialist competition to render a worthy salute to the 60th anniversary of the formation of the USSR. A final check showed that the regiment had successfully accomplished its training plans and fulfilled its socialist obligations.

In the new 1983 competition, school personnel have responded with pride and enthusiasm to the challenge of another unit, a Guards bomber air regiment which is also commanded by one of our graduates, Guards Lieutenant Colonel V. Tatarchenko. In entering into this socialist competition, the regiment called air force aviators to make their own contribution to the glorious traditions of the air Guards through self-sacrificing performance of their military duties, to stand a vigilant guard over the motherland and to improve organization and discipline.

To honor the school's glorious 50th anniversary it was awarded the Order of the Red Banner. How moving it was to see this high award added to the unit's colors, a symbol of military honor, valor and glory, by Colonel General of Aviation L. Batekhin, chief of the air force's political directorate and another one of our graduates.

Our school is now training pilot-engineers. Our graduates carry with honor the highly respected title of "graduate of the Tambov Higher...."

On the basis of socialist competition results for 1982, the school won the title of "Best USSR Air Force Flight Training School" and was awarded the Air Force's challenge prize.

The graduation of each new class of military pilots is a credit to our entire organization—commanders, political personnel, instructors, pilots, navigators, engineers and technicians.

The educational process here is a complex one. Students have to develop an inner conviction of the wisdom and necessity for the requirements imposed by regulations and of the essential soundness of regulation procedures. The school's routine is oriented toward the development of this conviction.

This education begins in the very first days of the training program. Political surveys and informational sessions with the students. Events at home and abroad are always tied in with the goings-on at the school, the course work and activities within the subunit [podrazdeleniye], with service, training and performance of duty.

The educational process takes a variety of forms: readers' conferences, friendship evenings, meetings with war and labor heroes, pupils and students and amateur performances put on by the students themselves.

Readers' conferences are occasions for the discussion of popular books by Soviet military leaders considered worthy of attention and topics concerning courage, mastery of

military skills, the heroism of the Soviet people during the war and life and military in the everyday peacetime world.

So here we see what were only a short time before mere schoolboys gradually transformed into soldiers with a sense of personal responsibility for missions they are assigned and sensing the approach of that great turning point in their lives—the beginning of their flight training. By the start of their second year of training they are already no longer what they used to be; you wouldn't recognize them any longer. They are now mature soldiers from whom you can demand things and to whom you can entrust things.

The educational process doesn't stop here, of course. It continues on uninterrupted. The student has to develop into a pilot and a teaching commander. And this is what he becomes. Beginning with their very first course, students will study party history, political economy, Marxist-Leninist philosophy and scientific communism as the legacy of the great revolutionary thinkers and the theoretical foundation of the Soviet Army's invincibility.

Future pilots, the students here are an exceptionally close-knit group. They do everything as a group, they have everything in common: success and failure, joy and disappointment. They help one another both in their training and in their sports activities. Close friendship bears excellent fruit—high test scores and consistently good performance.

It's a pleasure to see our students, future officers, and talk to them: they're knowledgeable, well-read and tactful. That's why they're held in such high esteem in the schools we sponsor, where they perform a great deal of public service: they direct the activities of a number of different groups, assist Pioneer and Komsomol organizations and help organize and conduct tours and military sports games.

The students are enthusiastic spokesmen for aviation. They meet with other young men to help them prepare for admission to the school. They explain to them that the future pilot-engineer needs to develop a thorough knowledge of mathematics, physics and chemistry and that the pilots of today's aircraft have to be in excellent health, which will require constant involvement in sports activities and physical training programs. A pilot must be daring, fearless, resolute and, what is most important, cool and collected with great endurance, for it is these qualities which constitute a guarantee of successful performance.

We have everything we need here to train our future pilots: highly qualified instructors and professors, good training facilities measuring up to modern-day requirements, first-rate aviation equipment and simulators and an experienced staff of flight personnel.

Having in fact everything they require at their disposal, the students are able continually to improve their mastery of both theoretical knowledge and practical piloting skills. Among these students we find the best of the best: O. Galantsev, here on an M. V. Frunze scholarship; G. Ivanov, winner of a Lenin Komsomol scholarship and V. Shatalov, rated "outstanding" in training and the first in the school to fly a new aircraft.

What we are accomplishing today is a step in the direction of new heights in the mastery of combat skills. We measure our performance against a precept of V. I. Lenin's. "Don't rest on your laurels; always strive to improve on what you have accomplished; keep trying to better your own record."

COPYRIGHT: "Kryl'ya rodiny", 1983

8963

CSO: 1801/329

## MILITARY SCHOOLS AND ACADEMIES

### OFFICER MILITARY ACADEMIES LISTED, ENTRANCE REQUIREMENTS GIVEN

#### Entrance Requirements, Partial List

Riga SOVETSKAYA MOLODEZH' in Russian 23 Apr 83 p 4

[Article and list: "Officer Is a Heroic Profession"]

[Text] For those who wish to become an officer, the path to accomplishing the dream is opened up by the military academies. Right now most of them are included in the category of institutions of higher learning. They have at their disposal experienced professional instructional staff, the most modern training-aidsbase, and the most complete libraries and sports complexes. Graduates of higher military training institutions receive the military title of "lieutenant" or "engineer-lieutenant," and a standard All-Union type degree is issued, with conferment of a military skill rating that is appropriate to the school's curriculum. What are the requirements for entrance to military training institutions?

The military academies accept young people from among civilian youth and soldiers, sailors, sergeants and petty officers of all branches of the service who have completed a secondary education, are in a state of health suitable for training in military-training institutions and successfully pass the competitive entrance examinations. Age is from 17 to 21 years, and also if one will be 17 in the year of entrance.

Civilian youths are given an application at the rayon (or city) military commissariat of the place of residence. It shows: the family name, the given name and the patronymic of the entrant, year and month of birth, home address, and also the type of military training institutions. Also appended to the application are: an autobiography, a reference from the place of work or study, a party or Komsomol reference, copies of papers about the secondary education, a copy of the birth certificate and three authenticated photographs (without headgear, 4.5x6 cm in size). The candidate presents the passport, serviceman's identity card or registration certificate and the original papers about secondary education and the birth certificate to the acceptance commission upon arrival at the military academy.

The competitive entrance examinations cover the program of general-education secondary school and, at most academies, are taken in mathematics (oral and



written), physics (oral) and Russian language and literature (or composition). Those who have studied the Russian language in a school program that was taught in a nationality language can write, instead of a composition, an account or take down dictation.

Examinations for entrance to military-training institutions are conducted for civilian youth candidates from 15 July to 5 August. The military commissariats send them to the entrance examinations at the call of the chief of the academy and issue free travel documents also for the journey. Upon arrival at the institution, the youth are provided with free food and dormitory shelter. Along with the entrance examinations they take a medical examination, and those entering higher flying and naval academies undergo additional vocational psychological selection. Youths who, upon completion of secondary school, have been awarded a gold (or silver) medal or graduate from secondary special-training institutions with "excellent" diplomas, enjoy a preferential right with respect to entrance. They are enrolled without entrance examinations, and, upon arrival at the higher educational institutions, take only one examination (oral or written).

More detailed information can be obtained from the military commissariats at the place of residence on all pertinent questions about entry and study at military training institutions.

#### Higher All-Arms Academies

Alma-Ata Higher All-Arms Officers' Academy imeni Marshal Sovetskogo Soyuza I. S. Konev (480094, Alma-Ata, 94).

Kiev Higher All-Arms Officers' Twice Red Banner Academy imeni M. V. Frunze (252066, Kiev, 66).

Leningrad Higher All-Arms Officers' Academy Twice Red Banner Academy imeni S. M. Kirov (198903, Leningrad-Petrodvorets, 3).

Moscow Higher All-Arms Officers' Orders of Lenin and the October Revolution and Red Banner Academy imeni Verkhovnyy Sovet RSFSR (109380, Moscow, Zh-380).

Omsk Higher All-Arms Officers' Twice Red Banner Academy imeni M. V. Frunze (644004, Omsk, 4).

The academies prepare the officers with a higher education. Graduates of the military training institutions are awarded the military title of "lieutenant" and are issued standard All-Union type degrees with conferment of a military skill rating that corresponds to the school's curriculum.

The instruction period lasts 4 years.

More detailed information on all pertinent questions about entry to and study in military training institutions can be obtained at the military commissariats at the place of residence.

## Military Training Institutions for Air Defense Troops

Vilnius Higher Officers' Academy for Air Defense Electronics (232003, Vilnius, 3).

Kiev Higher Antiaircraft Missile Engineers' Order of Lenin Red Banner Academy imeni S. M. Kirov (252048, Kiev, 48).

Leningrad Higher Antiaircraft Missile Officers' Order of the Red Star Academy imeni 60-Let Velikogo Oktyabrya (197061, Leningrad, P-61).

Pushkin Higher Order of the Red Star Academy of Air Defense Electronics (188620, Leningrad, Pushkin, 1).

Stavropol Higher Military Aviation Academy of Air Defense Pilots and Navigators (355021, Stavropol, 21, kray).

The period of instruction at the engineers' academies and at the engineers' faculty of the Pushkin Academy is 5 years, at other academies and also at the Officers' Faculty of the Pushkin Academy it is 4 years.

The academies prepare the officers with a higher education.

## Continuation of Military Academy Listing

Riga SOVETSKAYA MOLODEZH in Russian 29 Apr 83 p 4

[Listing: "Officer Is a Heroic Profession"]

[Text] Higher Military Academies for Chemical Defense

Kostroma Higher Military Officers' Academy for Chemical Defense (156015, Kostroma, 15).

Saratov Higher Military Engineers' Academy for Chemical Defense (410037, Saratov, 37).

Tambov Higher Military Officers' Red Banner Academy for Chemical Defense (392011, Tambov, 11).

The schools prepare officers with a higher education. Graduates of the military training institutions are awarded the military title of "lieutenant" and are issued a standard All-Union type degree with conferment of a military skill rating that is appropriate to the academy's curriculum.

## Higher Military Engineers' Academies

Kaliningrad Higher Engineers' Order of Lenin Red Banner Academy of Engineer Troops imeni A. A. Zhdanov (236022, Kaliningrad, 22, oblast).

Kamenets-Podolsk Higher Military Engineers' Academy imeni marshal inzhenernykh voysk V. K. Kharchenko (281900, Kamenets-Podolsk, Khmel'nitskiy Oblast).

Tyumen Higher Military Engineers' Academy imeni marshal inzhenernykh voysk A. I. Proshlyakov (625028, Tyumen, 28, oblast).

The period of instruction is 4 years (at Kalingrad it is 5 years).

The academies prepare officers with a higher education. Graduates of the military-training institutions are awarded the military title of "lieutenant" and are issued a standard All-Union type degree with conferment of a military skill rating that is appropriate to the academy's curriculum.

#### Higher Military Academies for Communications

Kemerovo Higher Military Officers' Academy for Communications (650020, Kemerovo, 20).

Leningrad Higher Military Engineers' Academy for Communications imeni Lensovet (193316, Leningrad, 316).

Novocherkassk Higher Military Officers' Red Banner Academy for Communications imeni Marshal Sovetskogo Soyuz V. D. Sokolovskiy (346418, Novocherkassk, 18).

Tomsk Higher Military Officers' Order of the Red Star Academy for Communications (634056, Tomsk, 56).

Orel Higher Military Officers' Academy for Communications imeni M. I. Kalinin (302034, Orel, 34).

The period of instruction is 4 years.

Graduates of the academies for communications are sent for service to all branches of the USSR Armed Forces. Entrance examinations are conducted for servicemen beginning 1 July, for civilian youth beginning 10 July.

The academies prepare the officers with a higher education. Graduates of the military education institutions are awarded the military title of "lieutenant" and are issued a standard All-Union type degree with conferment of a military skill rating that is appropriate to the school's curriculum.

#### Higher Military Academy for Rear Services

Vol'sk Higher Military Order of the Red Star for Rear Services imeni Leninskiy Komsomol (412680, Vol'sk, 3, Saratov Oblast).

Moscow Higher officers' Academy of Road and Engineering Troops (143909, Balashikha, 9, Moscow Oblast).

Yaroslavl Higher Military Finance Order of the Red Star Academy imeni general armii A. V. Khrulev (150038, Yaroslavl, 38).

Gorkiy Higher Military Academy of Rear Services (603125, Gorkiy, D-125).

Leningrad Higher Order of Lenin Red Banner Academy of Railroad Troops and Military Traffic imeni M. V. Frunze (190000, Leningrad, center).

The period of instruction depends upon the specialty chosen at these academies--4 to 5 years.

The academies prepare officers with a higher education. Graduates of the military training institutions are awarded the military title of "lieutenant" and are issued a standard All-Union type degree with conferment of a military skill rating that is appropriate to the academy's curriculum.

#### Higher Military Automotive Academies

Ryazan Higher Military Automotive Engineers' Order of the Red Star Academy (390014, Ryazan, 14).

Samarkand Higher Military Automotive Officers' Academy imeni Verkhovnyy Sovet Uzbek SSSR (703056, Samarkand, 56, Uzbek SSR).

Ussuriysk Higher Military Automotive Officers' Academy (692521, Ussuriysk, 21, Maritime Kray).

Chelyabinsk Higher Military Automotive Engineers' Academy (454029, Chelyabinsk, 29).

The period of instruction in the engineers' academies is 5 years, in the officers' academies it is 4 years.

The academies prepare officers with a higher education. Graduates of the military training institutions are awarded the military title of "lieutenant" and are issued a standard All-Union type degree with conferment of a military skill rating that is appropriate to the academy's curriculum.

#### Higher Naval Academies

Higher Naval Academy of Underwater Operations imeni Leninskiy komsomol (198093, Leningrad, L-93).

Higher Naval Engineers' Order of Lenin Academy imeni F. E. Dzerzhinskiy (190195, Leningrad, F-195).

Higher Naval Academy for Electronics imeni A. S. Popov (198135, Leningrad-Petrodvorets, 4).

Kaliningrad Higher Naval Academy (236026, Kaliningrad, 26, oblast).

Sevastopol Higher Naval Engineers' Academy (335033, Sevastopol, 33).

The period of instruction is 5 years.

The academies prepare officers with a higher education. Graduates of the military training institutions are awarded the military title of "lieutenant" and are issued a standard All-Union type degree with conferment of a military skill rating that is appropriate to the academy's curriculum.

11409

CSO: 1801/331

END